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This overview was designed to illustrate how elementary education is a total program based on the natural growth and development of children. Ten humanistic goals are identified as of fundamental importance for a fully educated person, and the responsibilities of the school in achieving these goals are discussed. Three educational objectives are emphasized as pervasive through all stages of development: developing basic skills, acquiring knowledge, and establishing personal values. Three program levels are outlined for children 4 and 5 years old, 6, 7, and 8 years old, and 9, 10, and 11 years old. The program goal for each level is identified, and the general characteristics of children in this age group are described. Specific curriculum and classroom activities suitable to each age group and the attainment of human goals are presented in narrative form. (JD)

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THE ELEMENTARY SCHOOL CURRICULUM: AN OVERVIEW

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FOREWORD

This bulletin offers to the school people of the State an overview and summary of the curriculum for kindergarten and grades 1-6. It highlights the suggestions and recommendations which the Education Department is making to the elementary schools through handbooks, bulletins, pamphlets, and other publications now in the schools or projected for use in the near future.

In a condensation, there is the danger that the full scope and sequence of the school program will be obscured. Inevitably much detail has been left out. It is not intended that this publication be substituted for state syllabuses, or local courses of study.

This publication is designed to give teachers a quick overview of the entire elementary school program. It also may serve as an ever-present vista for administrative and supervisory officers through which they can glimpse reasonably accurately the elementary school program in action, know some of the things to look for when they visit classrooms, and sense some of the facilities and leadership which their school systems must provide for teachers if the program is to move forward.

The Department is appreciative of the assistance it received from many sources in the preparation of this bulletin. It expresses particular thanks to Kenneth Kimball, Guilderland; Barbara Mason, New Rochelle; Lee Sylvan, Glen Cove; Mary Temple, Pittsford; and Mildred Whitaker, Lancaster, who served as an advisory committee in designing this revision. Charlotte Brody, New York City; Kathleen Cooke, Albany; Virginia Lowe, Slingerlands; and Barbara Mason, New Rochelle prepared the original manuscript. James Cleary, Westmere, very graciously reviewed the manuscript before publication. The manuscript was also reviewed by specialists from many areas of the Department. Dorothy M. Foley, associate, Bureau of General Education Curriculum Development, coordinated the project and prepared the manuscript for press.

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INTRODUCTION

In 1976 there were approximately 2,140,000 children in the elementary schools of the State of New York. To attempt to define an educational program for such a mass of youngsters seems a mammoth task unless one views them as a whole needing one diet. As educators, however, we know they are not one and that their diet must befit their needs. A program cannot be prescribed, a series of experiences dictated, or computerized systems developed which will guarantee that every child leaving grade 6 will be at the same level of development. Nor should such a project be attempted.

Every one of these 2,140,000 children is different. Each child has different abilities, talents, interests, needs, and potential. Each child brings to school different experiences, attitudes, values, heritage, and needs. Each child has a personal growth pattern, learning style, and emotional framework. Just as no two children look alike, so, too, are no two children alike in other characteristics.

However, fortunately for educators, parents, and humanity, just as there are similarities in children's appearances, so, too, are there similarities in other attributes. It is these similarities which make it possible for us to make some generalizations about children's growth and development. It is these similarities which make it possible for us to plan for children's education, develop curriculum frameworks, and establish achievement checkpoints. It is these similarities that make it possible for us to define an educational program for elementary school youngsters of New York State.

The Children

Children grow by leaps and bounds, by stops and starts. What the child finds impossible to do today, she or he does with ease tomorrow; what she or he finds totally absorbing today, she or he finds boring tomorrow; what she or he finds new and frightening today; she or he finds challenging tomorrow. At the same time the todays and tomorrows are not literal. The adult may sometimes feel that the child is stuck at today and will never reach tomorrow. However, with guidance and support, she or he grows and develops and reaches often unpredictable heights.

Comparisons between the growth of any two children will show differences. However, there are sequences to growth. The sequences are about the same for everybody but the age at which individuals arrive at a particular stage in the sequence varies widely and not all individuals reach the same levels of development.

Because there is a sequence to growth and development of children, it is

important to know where a particular child is before planning a program for her or him. Just as a child cannot learn to feed himself or herself until he or she has developed the motor coordination to hold the spoon and get it to the mouth, the child cannot learn to read and write until he or she has developed a degree of auditory and visual discrimination. To push a child into tasks for which he or she is not ready, can lead not only to immediate frustration, but also to later failure and disinterest. Not all children are ready for the same thing at the same time.

The sequence of growth and development makes it possible for us to delineate characteristics of various chronological ages. However, it must be remembered that these are generalizations and do not necessarily refer to all children of an age or to a particular child of a certain age. Defining characteristics of the 5-6 year old or the 10-11 year old, gives us a gauge to work by. It tells us what we might expect, what behaviors have been observed in children of an age, and what types of cognitive development have been identified in learning sequences. The sections in this publication entitled, "What the Children Are Like," are meant to provide a guide for identifying growth patterns of children and to assist educators in judging the stage of development of a particular child.

In each particular age level, wide discrepancies are common. The older the children are, the wider variation one might expect to find. In a group of 5-year-olds a one-inch difference in height may be the maximum; in a group of 11-year-olds one could expect to find as much as a six-inch difference. All other areas of development will show relatively widening differences. Such knowledge helps us to devise programs which become increasingly wider in scope and provide continuously greater options.

In each section of "What the Children Are Like" an attempt has been made to briefly cite the physical attributes; creative, mental, and emotional traits; behavior patterns, and work and play habits indicative of each level. These indicators help determine the type of program, learning experiences, and materials appropriate for children at each stage of development.

The Program

The elementary school has the responsibility of assisting children in developing the basic skills, generalizations, creative potential, understandings, and concepts which will lead them to further learning, investigations and creative doing and thinking. By the time the children leave sixth grade it is expected that they will have achieved proficiency in reading, writing, and computation: that they will have an understanding of their community, country, and world: that they will have developed concepts such as democracy, ecology, and freedoms: that they will have investigated a wide range of topics; have experienced working in a large variety of media; have worked individually, in small and large groups; have developed a healthy self-image, work study skills, independence, and in general have a firm foundation in all those things which lead to a desire for further learning, and participation in society.

"Goals for Elementary, Secondary, and Continuing Education in New York State," issued by the Board of Regents in 1974, lists ten goals widely shared by the people of New York State for a fully educated person and describes the responsibilities of the school in attempting to achieve these goals. The goals assume the fundamental importance of the individual, and a commitment to freedom and to the acceptance of diversity of belief and action within the broad limits of a democratic society. The statement points out, "There are... three goals listed... as separate goals which are so pervasive that they could just as well be considered part of every goal. These are the goals labeled 'Basic Skills,' 'Knowledge,' and 'Values.' Development of basic skills is essential to the accomplishment of the other goals and is generally agreed to be a primary responsibility of the school today. Similarly, the achievement of each goal requires acquisition of relevant knowledge, which also is promoted by instruction. Although values education may be treated as a separate 'subject,' values and the process of making value choices can be taught in connection with any goal..."

In planning a program for the elementary school children of New York State, it is important to keep in mind the goals and the needs of children. Each experience planned for the children should be based on the child's stage of development, be built on previous experiences and build toward future experiences. Each activity, learning, and investigation should be a part of the total picture and lead always to the attainment of the stated goals.

In order to assist educators to think in terms of these overall goals, the program sections of this publication have been developed in those terms. Appropriate areas of investigation, procedures, and content for each level are delineated in terms of the goals.

These program sections are summaries with general trends, specific examples, and references to other Department publications. This bulletin is an overview and does not attempt to provide the total scope and sequence for any subject nor to present reams of suggested activities. Bulletins for the various subjects are developed by the Department to give a more concrete framework for developing local curriculum. A list of publications available in 1976 is included in the appendix of this bulletin.

In any publication of this sort there is a tendency to separate the elementary school curriculum into subject areas. Children, however, do not learn in compartmentalized sections. Children learn some skills in isolation, but then must apply them in an integrated setting to have them make sense. The section titled "Putting the Program Into Effect " is included in this publication to help show how the pieces of the curriculum fit together to provide a sound, relevant, appropriate program for elementary children.

AN OVERVIEW

The elementary school in New York State is the common school. All the children of the State go through it, and each child is different from all other children, with special needs, attitudes, desires, and ways of learning.

The characteristics which each child possesses are important for elementary education, because the elementary school years are the child's formative years. The status and pattern of the child's development are some factors that determine what can be learned at a particular age or time and what ways of learning are best.

The elementary school is deeply concerned with the individual differences among its pupils. Yet, fortunately for educators, the children in any age group are more alike than they are different. Each age is marked by distinguishable common characteristics, by many similar ways of behaving and learning. All children can be counted upon to have many basic needs in common, as well as many differences. Among these fundamental common needs are the need for a balanced day of rest, play, and work; a nutritious and varied diet; a feeling of being needed and loved; a secure place in one's group; a sense of identity and self esteem; opportunities for self-expression; and, of course, a need to gain gradually the common learnings which all citizens in a democracy must have.

Because of these common needs and common likenesses, the State may properly recommend a broad general framework for curriculum development in all schools of the State. Such a State framework cannot be expected to meet in exact detail the variety of specific needs which all children possess. Within this framework, however, the elementary schools of the State will be able to plan their local courses of study, adjusted to local situations and to the individual differences and needs present among their children. The New York State Legislature has very wisely placed upon local school boards the right and the duty of determining the course of study to be followed in their schools, subject to statutory requirements, to Regents rules and to the regulations and supervision of the Commissioner of Education.

To help local communities develop their own courses of study this publication is offered as an "Overview" bulletin. The 1954 bulletin, "The Elementary School Curriculum: An Overview," was in a sense a condensed outline of the New York State program as more fully developed in various curriculum handbooks, pamphlets, and leaflets. This revised Overview will follow the outline as suggested by the February 1974 publication, "Goals for Elementary and Secondary Continuing Education in New York State." Even though these ten goals are not in final form they are sufficiently

inclusive to be used as a basis for organizing curriculum content for this bulletin. Since subject matter is only the vehicle for achieving curriculum goals and since most schools are taking a new look at goals, we believe it makes sense to outline program suggestions along these lines. This is not to imply that various subject matter guides are obsolete or not relevant. They are most helpful in achieving these goals.

The following 10 goals are as listed in "Goals for Elementary, Secondary, and Continuing Education in New York State" issued in February 1974. Listed under each goal are the particular responsibilities of the school.

1. Goal: *Mastery of the basic skills of communication and reasoning essential to live a full and productive life.*

   School:
   a. Communication skills (e.g., reading, writing, speaking, listening, and viewing)
   b. Computational operations (e.g., mathematical conceptualitization, problem-solving, data collection)
   c. The logical process of thinking creatively, critically, and constructively in problem solving, planning, evaluation, analysis, research, etc.

2. Goal: *Ability to sustain lifetime learning in order to adapt to the new demands, opportunities, and values of a changing world.*

   School:
   a. Knowledge of contemporary society
   b. Knowledge of alternative futures
   c. Learning skills
   d. Personal planning skills
   e. Problem defining and solving skills

3. Goal: *Ability to maintain one's mental, physical, and emotional health.*

   School:
   a. Knowledge of good health habits and the conditions necessary for physical and emotional well-being
   b. Knowledge of the physical and health problems caused by drug addiction and other personally harmful activities
   c. Knowledge of sound community health practices
   d. Understanding body processes and functions
   e. Development of physical fitness
   f. Knowledge of safety principles and practices

4. Goal: *Understanding of human relations -- respect for and ability to relate to other people in our own and other nations -- including those of different sex, origins, cultures, and aspirations.*

   School:
   a. Respect for and knowledge of other social, cultural, and ethnic groups

b. Understanding one's relationship to his natural, economic, and social environment
c. Respect for the community of man
d. Understanding of home and family relationships and involvement in the home, community and society in general

5. Goal: *Competence in the processes of developing values -- particularly the formation of spiritual, ethical, religious, and moral values which are essential to individual dignity and a humane civilization.*

School:
a. Knowledge of the diversity of values
b. Skill in making value-based choices
c. Commitment to one's own values and acceptance of diversity of values in society

6. Goal: *Knowledge of the humanities, social sciences, and natural sciences at a level required to participate in an ever more complex world.*

School:
a. Knowledge of the basic methods of inquiry in each field
b. Interdisciplinary efforts to focus knowledge on problems

7. Goal: *Occupational competence necessary to secure employment commensurate with ability and aspiration and to perform work in a manner that is gratifying to the individual and to those served.*

School:
a. Developing work skills and habits
b. Developing awareness of work opportunities
c. Occupation selection
d. Occupational training and retraining

8. Goal: *Knowledge and appreciation of our culture and capacity for creativity, recreation, and self-renewal.*

School:
a. Knowledge of major art, musical, literary and drama forms
b. Appreciation of the diversity of mankind's historic and cultural heritage
c. Appreciation of beauty
d. Development of individual creative talents
e. Wise use of leisure time
f. Promotion of increased use of and appreciation for community resources (museums, historic sites, performing arts groups, etc.) that reflects our cultural heritage and achievements

9. Goal: *Understanding of the processes of effective citizenship in order to participate in and contribute to the government of our society.*

School: a. Knowledge about political, economic, and legal systems with an emphasis on democratic institutions and on the global interdependence of these systems
b. Knowledge of the American political process at national, State, and local levels
c. Knowledge about taxation and fiscal policy
d. Acquisition of citizenship skills:
1. Decision making
2. Group participation
3. Leadership and "followership"

10: Goal: *Knowledge of the environment and the relationship between one's own acts and the quality of the environment.*

School: a. Awareness of one's relationship to the environment
b. Preservation and wise use of resources
c. Understanding the effects on the environment of man's activities and values -- lifestyles, technology, population growth, energy utilization, etc.

These, then, represent the objectives of the schools of New York State. What a child needs and what society expects him to acquire are entirely compatible. They are the two prime factors which influence the selection of subject matter and activities as suggested by the State in the various curriculum areas of the elementary school.

There is one other set of important factors which influence the selection of content taught in elementary schools today. These factors largely determine the placement of the subject matter. They involve our present-day knowledge of how children learn, and their growth and behavior characteristics at different ages.

Questions of curriculum selection are influenced not only by the general needs of children and by what society wants them to have, but also by the nature of children and their readiness for learning at different ages.

A child growing up in the American culture, then, needs guidance in self-development, in interpersonal and intergroup relations, in understanding the world of people and things, in mastering the communicating arts and skills, in developing healthy, normal, well-adjusted personalities and in acquiring the moral and spiritual values which are inherent in American life.

Here, then, is the challenge offered the elementary school. It must develop a curriculum program which will meet children's fundamental needs, be in harmony with their natures, and give them what their communities and society want them to have. A brief overview along with the characteristics of elementary school children at various age levels is described in this bulletin.

LEVEL I

Young children learn through firsthand experiences

WHAT THE CHILDREN ARE LIKE

Level 1 - Four- and Five-Year-Olds

Many children encounter their first formal experience outside the home at four, for some the first step is at five. Others have been in child care centers at three or two, and others with baby sitters since they can remember. Some four- and five-year-olds have never played with other children until their first school experience; others have had opportunities to play with children of a wide age range. Some children, on their first school experience, have already had wide rich experience, others have had extremely meager experiences. Some children come eagerly to school, others are fearful and timid. There are some children who want to talk most of the time and others who find it hard to converse.

Some four- and five-year-olds have watched "Sesame Street," the "Electric Company," and a wide range of other television programs. Some have had older brothers and sisters teach them many things. Some Level I children are already reading, counting, adding and subtracting and doing other "academic" tasks; some Level I children are ready and anxious to learn the 3 R's; many Level I children are not ready to engage in reading and writing activities.

Four- and five-year-old children are all different and yet they are alike in many respects. They all need affection, warmth, and approval from their parents and teachers and the other people around them. They all need careful adult guidance and some limits and controls for their security and safety. They want and need much large muscle activity. They need opportunities to talk and practice the language they are developing.

Level I children show increasing ability to play with others and may work and play for short periods with three, four, or more children. They take

great pride in being able to do -- hop, skip, sing, read their names, recite their addresses. Four-and five-year-old children like repetition, stories, dramatic play, and magic. They can spend surprisingly long periods of time on activities that interest them but only short periods of time on activities beyond their physical and mental readiness.

Four- and five-year-old children thrive in the here-and-now environment that surrounds them. They learn through their own firsthand experiences. They need many opportunities to touch, feel, handle, create, build, experiment, and explore. Their interests are many and they learn from the familiar and the novel. Most of their time is spent on play, for play is the business of childhood. Through play, the children begin to clarify their confusions, orient themselves to their immediate world, accept themselves as creative individuals, solve problems, and build concepts.

In planning programs for Level I children, the wide diversity of talents, interests, and backgrounds must be kept in mind. In order to meet the individual needs of these children, probably the single most important thing to establish is a healthy learning environment. This means a place where the child feels secure, feels wanted and respected, feels free to explore, create, grow, and yet a place which permits temporary regressions. It means a place where there are many things to play with again and again (blocks, trucks, dolls) and new things to experiment with (sand table, art materials, books). It is an environment conducive to learning about oneself, one's world, people, and things. It is an environment which promotes success.

Young children need many opportunities to touch, feel, handle, create, build, experiment, and explore.

PROGRAM FOR LEVEL I

Four-and-Five-Year-Olds

Goal 1 - *Mastery of the basic skills of communication and reasoning essential to live a full and productive life.*

(a) Communication skills (e.g., reading, writing, speaking, listening, and viewing)

Four-and 5-year-olds have come a long way in the development of communication skills. They have learned to understand and use nonverbal communication - the smile, the frown, the tone of voice, the affectionate pat, the punitive slap. They have learned that words tell and explain. They have learned to use various forms of communication to express their needs, to show their feelings, and to better deal with their world.

As children enter Level I, 90 percent are articulating sounds correctly, using words and sentences, and comprehending simple instructions. Most 4-and 5-year-olds have had a variety of experiences, have seen people use books and paper, have watched much television, and have had some experiences with counting and measuring.

However, it must be remembered that these youngsters enter school with different experiences, and so their vocabularies and readiness are different. The stage of development of individual children needs to be identified in order to plan programs which build on each child's strengths and overcome deficiencies.

Most 4-and 5-year-olds are still at the egocentric stage and learn best through real personal experiences. They need to touch, to look, to taste, to see, to hear, to test, and try-out. Most of these children are not yet ready to learn through sitting and listening, nor through paper and pencil activities, though these approaches may be used judiciously.

The communication program at Level I is aimed at extending children's vocabularies, improving their ability to express themselves, and developing a concept of symbols. Such a program provides both familiar and new experiences with much opportunity to talk about them. It includes equipment and stimulation for much dramatic play, experimentation with new media, and interaction with individuals and groups. Opportunities are provided to listen to literature and view films. Time is provided for children to paint, draw, and use modeling materials to express ideas and emotions too complex for their vocabularies.

Level I children are eager to learn and also to please the adults in their life. They take great pride in recognizing their name in print and will

often attempt to write it. They enjoy telling, drawing, or painting a story and having the teacher write it down and read it back. They like to explain what is happening in pictures they look at or make. They enjoy learning rhymes and songs and exhibiting their accomplishments. All of these activities are important to the 4-and 5-year-old child and provide the conceptual basis for later reading and writing activities.

Most Level I children are not ready for decoding and encoding activities. The child who is ready, or is even reading in kindergarten, needs individual support to extend this skill. At the same time she or he needs the same type of concrete, physical activities as other 4-and 5-year-olds as well as experiences which will widen horizons and bring even greater comprehension in reading. These children should not be frustrated by denying them the right to read; nor, because of their skill, should it be assumed that they are totally ready to learn vicariously.

Other children at Level I have not developed an adequate speaking and listening vocabulary, are not talking in complete sentences, and have an immature conception of written, adult symbols. These children need time to assimilate new words, much interaction with other children and adults to practice what they are learning, much exposure to correct usage, and encouragement without undue correction or direction.

Level I children have opportunities to tell stories

By the end of Level I, children have a wealth of experience to bring to the tasks of reading and writing. They have learned to recognize simple symbols such as stop signs and arrows and know their name when it is in print. They have grasped the concept that words in print tell a story or present a message. They are able to identify and organize simple stories in sequence. They are now ready and eager to accept the challenge offered at Level II.

(b) Computational operations (e.g., mathematical conceptualization, problem-solving, data collection)

Just as 4-and 5-year-old children have processed a mass of language skills, so too have they dealt with a mass of mathematical skills. They have asked for a cookie for each hand, measured themselves against their parents or older brothers and sisters, and reached for the biggest piece of cake. They have usually had some experience with money, time, measures and quantity. They enter Level I having intuitively grasped certain mathematical concepts.

During Level I, many experiences are provided to increase mathematical understanding and to clarify mathematical concepts. Most 4-and 5-year-olds are not yet ready for sequential, structured teaching. They are, however, ready and eager for concrete experience and practice in using their developing sense of mathematical concepts.

Mathematic experiences for the 4-and 5-year old should be concrete, personalized, and investigative. Through such activities as distributing milk and straws, one-to-one correspondence may be established. Art and movement activities help to establish spatial concepts. Rote counting of beads and pennies, number songs such as "This Old Man" and "Ten Little Indians," and counting by the teacher help the children learn numbers in sequence. Other activities such as comparing groups and creating equal sets contribute to the growth of the concept of number.

An awareness of time is developed through discussion, using terms such as "time to clean up," "time to go home," and "it's almost 10 o'clock, time for morning snack." Calendar time is developed through recognition of birthdays, holidays, weekends, and special activities on particular days of the week. Geometry is a part of the young children's experiences as they work with blocks, puzzles, art materials, and other objects of varying size and shape. Measurement is of interest as they judge height next to their teacher and other children, and as they experiment with and talk about bigger, smaller, heavier, more and less. Fractions come into play when they share a piece of cake, work with pieces of crayon, and distribute apples.

The 4-and 5-year-old, through concrete experiences with many materials and through careful guidance on the part of teachers, gradually develops mathematical concepts and vocabulary. Through work and play, the young child encounters mathematical ideas and finds a need for numbers, measurement, problem-solving, and terminology. If encouraged to pursue these at an individual rate with only selective intervention on the part of the teacher, the child will develop the basis for further exploration and manipulation of numbers.

(c) The logical process of thinking creatively, critically, and constructively in problem-solving, planning, evaluation, analysis, research, etc.

Level I children are inquisitive and curious. They want to know how things work and where things come from. Most of the answers to their questions come from firsthand experiences. They taste, test, touch, watch, and listen. They probe and examine, ask, and answer. They are gaining the experience and background which will enable them to think more abstractly and learn more vicariously as they mature.

The skills of information gathering and processing can be successfully developed and in fact should be continuously encouraged and supported at Level I. These skills can be learned as the children study anything which has appeal and interest for them, whether a child or the teacher introduces the topical area. Sensitive questioning on the part of the teacher can lead the children into increasing their factual data, extending their knowledge, and developing their concepts. As the children watch the hamster in its cage, the teacher raises questions. "What is he putting in his mouth?" "How can he get so much in?" "How does he empty it out again?" "Where does he put the food that he empties from his pouches?" "Why do you suppose he does that?" Then by supplying picture books, films and filmstrips, and art materials and by observing other animals that gather and store food, the teacher leads the children into understanding of this characteristic of a number of mammals. Such questioning helps develop the children's process of inquiry and research, of finding evidence for generalizations and hypotheses, of extending information, and of observing or establishing relationships.

At Level I, children need time to assimilate information gathered. They need to think about it and use it in the way of the 4-and 5-year-old. Dramatic play, painting, modeling, building, drawing, questioning, constructing, and telling are usual ways for these children to sort, categorize, and suggest new ideas. Little intervention on the part of adults is needed when children are involved in these activities. A sensitive teacher observes and begins to understand individual styles of thinking.

If the children are encouraged to investigate in this way, without pressure, they will develop a more solid basis for the logical processes of thinking creatively, critically, and constructively. Further, they will engage in keener observations, sharper questioning, and more effective generalizing. These activities will continue at Level II and beyond, but with good foundation experiences at Level I, the child will more quickly move into more abstract and analytical processes.

Goal 2 *Ability to sustain lifetime learning in order to adapt to the new demands, opportunities, and values of a changing world.*

(a) Knowledge of contemporary society

Level I children have learned about familial and neighborhood society. They are aware of the responsibilities of various members of the family and their place within their individual family and neighborhood network.

On entering school, the children become aware of different structures. They learn that families differ in size and make-up. They become aware of single parent families, nuclear families, and extended families. They also become aware of the similarities in families. They see that in most families members interact with each other and assume certain responsibilities. Dramatic play, painting, and talking about families, comparing and contrasting them, helps the children to better understand their own family and begin to broaden this understanding to the larger community.

The societal structure of the school is often the first exposure many children have to a society outside the family. Here they begin to see that rules may be different in different environments. Working and playing with a group of 25 or more of one's peers may require more conformity then is required in the home. Time schedules may be more structured to allow for equitable sharing of materials and adults. Rules may be more strictly enforced to assure the health and safety of each child.

Peer group living makes the children aware of the give and take of social relationships and emphasizes the need to see the consequences of one's behavior. Teachers need to be alert to children's behavior so they can assist, clarify or mediate when needed, but not intrude. The role of the teacher of young children requires that special skill of listening unobtrusively so that one can step in quietly and gently at the proper moment. If the adult steps in too soon, it can impede the children's progress in learning to work out solutions; if intervention is too late, it will have allowed a difficult situation to develop and cause frustration and/or anger in the children. As the children learn to work and play in the school setting, they become aware of the workings of the entire school and its relationship to the community as a whole. The teacher encourages this by taking the children on walks through the school to observe what others are doing. She or he also takes the children on walks in the neighborhood to begin development of an awareness of services and businesses in the community.

(b) Knowledge of alternative futures

Level I children live in the present. Their concept of time is in the developmental stages. They are amazed that the adults in their life were once little children and though they may begin to verbalize, "when I grow up," they do not yet comprehend being an adult. However, it is not too early to begin developing understandings of possible alternate futures.

At Level I most of this is done by dealing with the concrete and looking ahead but a day or two at a time. A picnic is planned and the teacher

raises the question of what to do if it rains. The children then have an opportunity to consider the possibility of a change of plans and to offer suggestions on how to handle it. In this way the children are introduced to the possibility of change, are involved in preparing for it, and, are more able to cope with it.

In dramatic play, possible alternative futures are introduced, such as truck driver, police officer, nurse, secretary, teacher, and principal. The teacher provides symbols of pilots, presidents, dancers, and other careers that might be beyond the experience of the children. Through stories and films the children are introduced to these fields and encouraged to play the parts. Stories, films and conversations with people familiar with these fields enhance the children's understanding of a variety of careers. These preliminary experiences will form a basis for the development of career awareness at Levels II and III.

A dress-up corner provides accessories for dramatic play in career areas

(c) (d) (e) Learning skills; personal planning skills; and problem defining and solving skills.

At Level I, these three skills are so closely interwoven it is best to treat them simultaneously. The children are testing the world they know and are discovering. As they do this, they are developing learning skills, planning skills, and problem solving skills.

Most of this is done through play. A group of children decide to build a bridge with blocks. Through discussions, they begin to draw upon each other's knowledge of blocks and bridges. Through starting construction, they begin planning ahead. Through modification in construction as the work progresses, they encounter and solve problems. The teacher encourages this type of activity, allows the children to make mistakes, so they may resolve them, and only offers suggestions or advice when the safety of the children is at stake or when the frustration point is near at hand. This free exploration builds the children's confidence to try new activities and to explore new ideas.

Goal 3: *Ability to maintain one's mental, physical and emotional health*

Development of health habits begins at home before the child first comes to school. Most have learned to wash their hands before eating, to use a tissue when needed, to dress for the weather, and to rest when they do not feel well. The school supports and expands this development and, if necessary, initiates it.

The children learn to wash up

Time is provided for children to wash up before a snack which might include fruit juice or milk, raw or dried fruit. If children are in school for lunch, they are encouraged to eat a balanced diet, thus reinforcing good nutritional habits.

Most Level I children are familiar with medical examinations and most have had their first dental check-up. For some, these may not have been pleasant experiences. Often the examinations have involved immunization injections and a visit to the dentist may have meant having their teeth cleaned or a cavity filled. In spite of, or maybe because of, these experiences, young children frequently play the role of doctor, dentist, and nurse. Teachers can help clarify the positive aspects of these roles through subtle questioning and by guiding the children's play.

Young children are not usually familiar with hospitals. It is most valuable to encourage discussion, dramatic play and pictures about hospitals on a one-to-one basis or in small groups when a child reports that someone in her or his family is in the hospital. The birth of a baby and other positive experiences should be sought for such discussions. A visit to a hospital may be arranged.

The health program for 4- and 5-year-olds is based on the establishment of good habits. However, young children's natural curiosity and growing awareness of the world often bring questions into the classroom about more intimate or more devastating issues. If children raise questions about sex or where babies come from, they should be answered directly and honestly -

a long detailed explanation is usually not needed or wanted. If they raise questions about drug abuse or alcoholism, along with the brief answer some safety precautions need also to be stressed as the question probably wouldn't be raised unless the children have experienced the effect of these practices.

Safety rules need to be continuously taught and reinforced. The basics are introduced early in the year and include street crossing, bus safety, bicycling, playground and classroom rules, respectful use of tools and materials, and personal protection. Many of these rules the children may have already learned at home. However, the teacher reviews these with the children, provides role-playing experiences, simulations, and actual experiences. When taking a walk in the neighborhood with a group of children, the teacher talks about the correct way to cross the street, what a red light means and what a green light means. He or she insists the children walk on the sidewalk and cross only at corners. Fire prevention, both in school and at home, is discussed and practiced. As other occassions arise additional safety rules are discussed and reinforced until they become habits with the children.

Young children require a great deal of physical activity. They need opportunities to perform and explore all kinds of basic movement patterns. They need opportunities to develop agility, coordination, speed and endurance through a variety of large muscle activities. They need time to play outdoors, but their time indoors must also provide daily participation in movement activities.

In addition, there also need to be times for the children to rest. Periods of great physical activity should be followed by quiet times. Some four- and five-year-olds may fall asleep during rest time, others will just sit or lie quietly.

The mental and emotional health of the children is nurtured. The teacher shows concern for the children and their feelings. He or she greets each child on arrival at school and makes the child feel welcome. She or he has chats with individual children, listening to their problems, discussing their achievements and learning more about them. Expression of emotion through the arts (painting, drama, music) is encouraged. Through assurance and positive feedback, the teacher helps the children to develop the optimistic view that they are good and important members of society.

The health program for 4- and 5-year-olds is very basic. The immediate health and safety of the children is provided for, the safety rules needed for their protection are taught, demonstrated, reinforced, and strictly enforced. This is one area where the children are not given a great deal of leeway or encouragement to experiment. However, the teacher always guides the children in understanding the reason for these rules. She or he encourages the children to talk about them and role-play to deepen their understanding of the importance of such rules.

Goal 4: *Understanding of human relations - respect for and ability to relate to other people in our own and other nations including those of different sex, origin, culture, and aspiration.*

Many children at Level I are having their first experience in a peer society. This change in living moves the young child from the family group to a peer group where all relate to the same adults on equal footing. Learning to share teacher and materials, to respect the right of others, and to participate as part of a group are integral parts of early childhood education. This learning evolves over a period of time through everyday experience. The teacher assists this learning through guidance and through setting a positive model. The teacher respects the children and their rights, shares her or his time, and gently and constructively intervenes when children have conflicts.

Though the majority of children come to school realizing there are two different sexes, some have had little exposure to people of different origins, cultures, or aspirations. The children realize intuitively that people come in different sizes and shapes, but for some it may be the first time they are aware of different colors of skin or different languages. Many of these children are fascinated by these differences and curious enough to ask about them. Teachers should encourage discussion and assist the children in seeing similarities and differences and understanding the differences. Teachers need to conscientiously guide the children into overcoming any negative feelings so they may accept each other as individuals with similar needs and wants.

Celebrating birthdays and holidays is an important part of the program for 4- and 5-year-olds. Through such celebrations, the children begin to become aware of their national heritage. They can be introduced to different ways of celebrating through inviting parents to participate. Parents may prepare food, assist the children in creating decorations, and teach the children songs and dances. Stories and films showing how different people celebrate holidays may also be used. Through creating their own work and viewing the art of others, young children can begin to develop a sense of the beauty and diversity of other cultures expressed at holidays and celebrations.

Celebrating birthdays and holidays is an important part of the program for 4- and 5-year-olds

Goal 5: *Competence in the processes of developing values - particularly the formation of spiritual, ethical, religious, and moral values which are essential to individual dignity and a humane civilization.*

(a) Knowledge of the diversity of values

Young children come to school with many established values. The home environment has given the child clues to the parents' priorities. The family concern for such as cleanliness, orderliness, religion, and manners have established a framework for the child. At the same time, the child has sensed that all members of the family may not hold the same values.

The values the child encounters in school may differ from the values in the home. Rules, materials available, and the teacher's reactions are indications of what the teacher feels is important. The child learns that different people have different values.

(b) Skill in making value-based choices

Children begin to make choices at a very early age. There are particular toys a child chooses over others, foods he or she particularly likes, certain people he or she would rather be with. Early choices are based on the child's senses - what feels good, what looks good, what tastes good, what sounds good. Later choices also include reactions of other people - what makes another happy, what makes another angry - but are still self-centered.

During Level I, children should be given many opportunities to make choices and begin to recognize and accept the consequences of their choices. Young children can choose between two or three alternative activities such as block building, painting, or listening to a story. They do not yet have the experience to choose whether or not to go to school or to decide what they want to be when they grow up. The difference between choice making and decision making should begin to develop as a concept.

Once the child has made a decision, the teacher should help her or him accept the results of it. If the child has decided to paint, she or he shouldn't stop in the middle to go play with the blocks. By helping the child carry through his decision, the teacher is helping the child to be responsible for individual choices.

(c) Commitment to one's own values and acceptance of diversity of values in society

Peer pressure can cause a child to change his or her action or direction before adequately weighing the situation. Teachers need to provide guidance and support to young children to help them think for themselves. Because everyone else is doing it, is not justification for an action. Situations where "everyone" is running when they shouldn't be or where "everyone" is talking when they should be quiet, is the time for the teacher to intervene. In this way, the teacher helps the children to understand that each person is responsible for her or his own actions.

Goal 6: *Knowledge of the humanities, social sciences, and natural sciences at a level required to participate in an ever more complex world.*

(a) Knowledge of basic methods of inquiry in each field

Young children are naturally curious. The world is new to them and they are discovering it and their relationship to it. They want to know the how and why of things.

Teachers of Level I children encourage and foster this natural curiosity. Many opportunities are provided for the children to explore and the teacher guides them in discovering the how and why. The discovery of an anthill in the playground becomes a time for learning through observation. Working at the water table - or sink - becomes a time for learning through hypothesizing - what might have happened before; what might happen next.

Through these experiences the children are beginning to use the basic methods of inquiry. They are learning to gather information through observing. They are learning to test ideas through practical application. They are learning to hypothesize.

(b) Interdisciplinary efforts to focus knowledge or problems.

The learning process for young children is an interdisciplinary process. Knowledge is processed through feeling, seeing, touching, listening, manipulation, and talking about. They take a piece of information and try it out in new settings and new ways until that information becomes understandable.

The program for Level I children is not divided along subject matter lines. Though the children engage in activities which may be labelled language arts, mathematics, social studies, science, etc., the entire program is coordinated. All of the disciplines meld together into problem-solving situations relative to the child. What to do for mother for Mother's Day may result in planting flower seeds. What might be labelled a science activity (growing plants) has actually involved discussion (language arts), decision making, mothers (social studies), one-to-one correspondence (math), decorating flower pots (art), and perhaps other areas. No attempt is made to divide these subjects. It is a case of solving a problem and learning new things.

Goal 7: *Occupational competence necessary to secure employment commensurate with ability and aspiration and to perform work in a manner that is gratifying to the individual and to those served.*

(a) Developing work skills and habits

Much of the activity at Level I involves the development of work skills and habits. Children are encouraged to arrive at and leave school on time. They are expected to come to school every day unless they have a valid excuse. They are taught to remove their wraps on entering the room and to become involved in available activities.

There are areas in the room designed for certain activities and the children learn to abide by these. Blocks are kept in the block area and paints in the paint area. Children in this way come to recognize work and spaces.

Materials are available to be used, but each person or group leaves the materials and areas the way they found them. Paint brushes are washed after use, puzzles are put away with all pieces in place, books are handled with care so someone else may read them. These activities are not only important for the smooth running of the group, but also are important as part of the long range development of good work habits.

It must be remembered that the children need time and assistance before these will become skills and habits. Teachers alert the children shortly before clean-up time so that they will be able to conclude their activities. She or he provides time for clean-up and gives assistance where needed.

(b) Development of awareness of work opportunities

Most 4- and 5-year-olds have the word "work" in their vocabularies. They know that their mother and/or father or guardian goes to work and has work to do at home. The children themselves have work to do and may even use the sentence, "Don't bother me, I'm working." Yet, they are just beginning to comprehend the meaning of work.

The program for Level I children is people-oriented. Part of this involves what people do. The social studies program at Level I emphasizes the service and business personnel who are directly involved in the child's life at home and at school. They learn about the role of the teacher, the custodian, the fire fighter, the doctor, the police officer, store personnel, the nurse, and others who work in the school or community. They see these as people with jobs to do. The exposure to these people and their specific functions are recreated by the children in their dramatic play. Time and space is allocated in the classroom for such dramatic play. Props such as fire fighter's hats, nurse's hats, mechanic's tool boxes and mail carrying bags are helpful and can be purchased or made by the children. Teacher guidance assists the children to a fuller, more in-depth awareness of particular jobs, especially careers not common to their experience, such as writer, dancer, printer.

As part of this developing awareness of job opportunities, teachers widen the children's horizons. They are careful not to sex-stereotype jobs and help to overcome any preconceived sex-stereotyping the children may have already developed. Teachers also introduce to the children unfamiliar jobs or jobs outside their immediate world, such as dancers, writers, newspaper reporters, artists, and politicians. Such occupations may be introduced through television, films, stories, visits by such people or trips to where these people are working. The purpose is always to build a wider base from which the child can operate.

(c) Occupational selection and (d) Occupational training and retraining are not appropriate at Level I. The foundation built for work skills and habits, and the developing awareness of work opportunities, however, provide the child with the background needed for occupational selection and occupational training and retraining at later levels.

Space is provided for dramatic play

Goal 8: *Knowledge and appreciation of our culture and capacity for creativity, recreation, and self-renewal.*

(a) Knowledge of major art, musical, literary and drama forms
(b) Appreciation of the diversity of mankind's historic and cultural heritage
(c) Appreciation of beauty
(d) Development of individual creative talents
(e) Wise use of leisure time
(f) Promotion of increased use of and appreciation for community resources (museums, historic sites, performing arts groups, etc.) that reflect our cultural heritage and achievements

The program for Level I children is highly geared to the achievement of Goal 8. Since 4- and 5-year-olds are beginning learners, much of this learning comes through the arts, through creative approaches, and through play. These young children are not ready for extended pencil and paper activities or learning vicariously. They need direct, concrete experiences which involve their total being. Therefore, the arts are a natural activity.

During Level I, the children are exposed to a wide variety of art media. This may be the first exposure to paint, crayons, scissors, and clay for many. Children require time to explore their properties. Does the paint go where you want it to or does it run down the paper? What happens when you mix different colors of paint together? How are paint and crayons different and similar? What is clay good for? The children do not raise the question orally nor do they necessarily verbalize the answers. Through experimentation they discover how different materials work and what they can do with them. The primary consideration at this stage should be respect for the child's use of the material with emphasis on process and not product.

Music is very much a part of early childhood education. The children enjoy learning simple songs and singing together. They also enjoy making up their own songs and will often ad-lib songs while playing. Musical games also hold high appeal for 4- and 5-year-olds. Many have learned some of the old favorites such as "Ring-Around-the-Rosy" before coming to school and will happily teach other children.

These young children react to music. They need little encouragement to move to various pieces. They enjoy the freedom to move as they feel and also like to learn simple routines such as marching. Some Level I children may have started dancing lessons. These children should be provided opportunities to perform for their classmates and to teach others some steps. Most of their activity in this one area is unstructured. Freedom to move to music helps the children develop a feeling for music and to enjoy their bodies and what they can do with them.

Stories are frequently read to Level I children. They also enjoy listening to adults tell stories, watching stories unfold through film, and turning the pages of picture books while listening to records. Through these activities the children learn more about the world, increase their

vocabularies, and have their imagination stimulated.

A natural outgrowth of any experience for the Level I child is role playing. It is important that time and materials be provided the children for this role playing. It is through acting out stories, playing house, reenacting a visit to the doctor, and pretending, that children learn. They assimilate knowledge and develop concepts by working through roles.

Though most of the dramatic activity at Level I comes through the children's own need to role play, the teacher does provide some more structured activity to help develop the children's ability to express themselves. This may be done to music when the children pretend they are cats, or clowns, robots, or dolls. Other times a small group may work with the teacher to develop a brief skit to demonstrate a story or event for the other children.

Whenever possible, the children should also be exposed to live theater. This may be a play put on by other children in the school or a performance by professional actors. Such experience helps the child develop an appreciation for an important part of our culture.

Even at 4 and 5 years of age, individual talents are evident. Some children seem to have a way with words, some an intuitive artistic ability, some an ear for music, some a talent for building. Each of these talents is recognized and nurtured. However, the children are still involved in discovering themselves and the world. Therefore, every child is exposed to and involved in experiences with all media. Each of these experiences is a way for the children to express themselves and is therefore a creative experience. Success is measured in terms of individual reactions; products are not sought nor competitively evaluated. The product the children create may be shared to support pride in what has been accomplished.

Displaying children's work attractively, creating artistic bulletin boards, and keeping the room neat and attractive help children to develop an appreciation for beauty. Well-kept plants carefully placed can be a space conducive to rest. Books and pictures neatly arranged invite browsing. The discriminate use of pattern and color add interest to a room. A number of children moving about a room working and playing together may create an appearance of confusion. However, confusion and disorder is temporary and the room is generally well-ordered and pleasing to the eye.

Beauty is also found outside the classroom. Children's attention is brought to the way snow glistens in the sun, the uniqueness of individual flowers, the appearance of a skyscraper and all the other people-made and natural beauty in the school yard and community.

The art, the music, and the literature intended for the 4- and 5-year-old is a delight; providing many opportunities for the children to express themselves, to discover new media, and to share experiences encourages their creativeness.

Goal 9: *Understanding the processes of effective citizenship in order to participate in and contribute to the governance of our society*

(a) Knowledge about political, economic, and legal systems with an emphasis on democratic institutions and on the global interdependence of these systems

(b) Knowledge of the American political process at national, State, and local levels

(c) Knowledge about taxation and fiscal policy

(d) Acquisition of citizenship skills
    1. Decision making
    2. Group participation
    3. Leadership and "followership"

Level I children are just beginning to develop an awareness of institutions outside the home. They may have gone to the polls with a parent or guardian. They may have heard talk about the president, the mayor, the governor. They have paid a tax when buying candy, a toy, or a gift. The school continues to develop this awareness. In preparation for Election Day, pictures of major candidates may be posted on the bulletin board. Winners' pictures would form the display for the day after election. The extra pennies needed for the tax on items bought and talk about school and income taxes is the child's introduction to taxation. At this level, however, there is not an understanding of the democratic process or taxation and fiscal policy. Rather a foundation is started whereupon later understanding can be built. For the present, the learnings are incidental based on the children's immediate experience with these topics. Their vocabularies begin to include words such as tax, vote, president, and election, but no effort is made to develop the concepts they represent.

At Level I, most of the emphasis in the development of goal 9 is on the acquisition of citizenship skills. For many, this is their first experience in a larger society. Group participation is one of the first things the children learn. The children develop a sense of fairness and give-and-take. Not everyone can paint at the same time, so people have to take turns. Building with blocks sometimes calls for assistance, so two or more children need to work together. Fire drills call for quick compliance and everyone must participate.

The Level I program is structured so that there are opportunities for group discussion and group activities as well as individual pursuits. The children learn to take turns, to make group decisions, and to get along with each other. The key word is cooperation. This is not taught verbally, but is lived daily under the teacher's guidance.

As the children work and play together, there is opportunity for individual children's strengths to come forth. This in turn allows everyone to excel at something. This does not necessarily engender a highly competitive atmosphere. On the contrary, it says that each person is different and people do things differently. In this atmosphere leadership passes around.

Children move from the position of leader to follower with ease and find it as much fun to provide ideas as to follow some other person's ideas. There is no pressure to assume either role, but the perceptive teacher provides the necessary intervention as needed to assure the smooth running of the group.

Level I is the time when the children learn what it means to live in a democracy through actual experiences. The atmosphere of the classroom, the respect children and teachers show each other, opportunities for individuality within the group and establishment of rules for group living are essential elements for 4- and 5-year-olds. These children learn what is practiced, not what is preached. Exposure to an environment based on the ideals of democracy and democratic principles gives the child a necessary base for exploring these in an academic way at a later age.

There are opportunities for group discussions

Goal 10: *Knowledge of the environment and the relationship between one's own acts and the quality of the environment*

(a) Awareness of one's relationship to the environment
(b) Preservation and wise use of resources
(c) Understanding the effects on the environment of man's activities and values - lifestyles, technology, population growth, energy utilization, etc.

Young children are continuously testing themselves against their environment. They are curious about their world and their control over it. A puddle is for splashing and floating. Snow is for rolling and sliding. Lightning bugs are for chasing and catching.

Often young children destroy in their exploration and experimentation. Being curious about a flower they may pull it apart to see how it's made. Guidance needs to be provided, to achieve a balance between the value of investigating and the value of protecting.

At Level I many opportunities are provided for the children to observe and learn about the environment. Plants are used in the classroom as decoration and as learning tools. The children learn that the plants need light and water in order to grow. They plant seeds, care for them and watch them grow. The children are given opportunities to create an environment by arranging scraps of colored cellophane on the glass of an overhead projector to splash hugh patches of color on the walls of a darkened room. They organize miniature environments within the limits of a sand table, relate to the spatial environment of an air tunnel and improve the environment of their own classroom with murals and transparent window designs. Early involvement in environment related activities develops sensitivities to space and design.

The children are taught to watch animals and learn about them. The eye level of the 4- and 5-year-old gives them a different vantage point than the adults. An anthill is often more quickly located by the child and time is well spent watching this industrious group of workers. On the other hand a bird's nest or a squirrel in the tree may have to be pointed out to them. The children are taught to watch these quietly and not to disturb them.

A walk through the school yard, a nearby park, or even a city street is used to bring children's attention to care of the environment. Observing growing things, plants and animals, helps the children appreciate the wonder and beauty of them. Learning not to interfere with them establishes a respect that is necessary for the larger concepts of conservation which are introduced at a later age.

The concept of preservation is introduced in terms of the children's resources. Crayons are put back in the box so they will be available the next time they are needed. Scraps of art paper are saved for a project on another day. It is important that teachers be alert to these details as an introduction to the idea of limited resources and caring for what is available.

Level I children are also taught about litter. In the classroom unusable scraps are thrown in the proper waste containers. Part of a picnic lunch is collecting all scraps and disposing of them. Papers are not dropped on the street but put in containers. These habits are established early and reinforced as the children grow.

Children learn to clean up after activities

Respect and care for the environment and all the things in it are introduced at Level I. The teaching and learning appear to be spontaneous. It is related to the task at hand and relative to young children's needs. Teachers are ever alert for opportunities to guide the children to a greater appreciation of their environment and steps they can take to preserve it. These initial steps, such as Conservation Day projects, are simple and easily accomplished by 4- and 5-year-olds, and are vital to the process of developing citizens with a concern for the preservation and wise use of the world's resources.

LEVEL II

Children of 6, 7, and 8 years are eager to learn

WHAT THE CHILDREN ARE LIKE

Level II - Six-, Seven-, and Eight-Year-Olds

The 6-, 7-, and 8-year-old's growth proceeds more slowly than heretofore. A lengthening out of the body begins about 6 and the child enters a period of slow and steady growth. During this period, growth may average two to three inches during a year.

The large muscles are still developing at Level II and the children want and need gross bodily activities and should not be expected to sit still for extended periods of time. The children are developing better control of fine muscles. At six many children are still inept at activities, such as writing, which involve the smaller muscles. At eight they have developed much more control and this is evident in their writing.

The eyes of the 6-year-old are not yet fully mature and there is a tendency towards farsightedness. Early reading books have large type. Before the child is 8, the eyes are ready for more close work and book type is closer to adult size.

Children of this age are also changing emotionally and socially. The 6-year-olds are becoming better able to engage in group activities. By 8, they are usually willing leaders and willing followers agreeable to suggestions of group leaders. They are beginning to work together well in classroom groups.

During Level II, the children begin to exercise independence and become more self-assertive. They are emerging from the egocentric stage which is characteristic of young children. They are ready to tackle anything and often show more enthusiasm than judgment. Each is becoming aware of the adult world and trying to find a place in it.

Level II children still want and need much adult encouragement and approval. They are concerned about achieving status in their family groups, with their age-mates, and in the larger community. They are reaching out for independence and becoming increasingly influenced by the peer group. At the same time, they need a great deal of friendly encouragement from their teachers in the increasingly difficult tasks encountered in school and in the many activities that give them a feeling of success.

Level II children begin to move out beyond the immediate environment. They want to know about children living in other places and how their lives are similar and different. They like to look at simple maps and to study pictures of other places. They are interested in how things work and want to know more and more about the workings of nature. They are beginning to

understand time - past, present, and future. Money is very intriguing, and they are ready for guidance in its use and management. They are apt to be avidly interested in television, records, the movies, and all sorts of objects to collect. This age level learns best from the here and now environment and firsthand experience. All of these children need many opportunities to touch, feel, handle, experiment, and explore.

Level II children are alike in most of these respects yet they differ too. Some of the children may be gifted, many fall in the average range, others are growing more slowly. Each child needs to be treated as an individual and to have the school program geared to her or him. The school program needs to be flexible enough to meet each child at his or her stage of development. If required to perform mental or physical tasks beyond their maturity, the children become discouraged. If required to engage in activities for which they have already developed competency, they become bored.

One of the most striking examples of the developmental changes in Level II children as compared with Level I occur in picture making. More sophisticated symbols, elaboration of the rudimentary figure, an awareness of the horizon line, progressively more complex spatial arrangements plus schematic ordering of content to facilitate narration alert us to the fact that Level II children are becoming more and more capable of the kind of sequencing, abstract thinking and logic that is basic to language, science, and mathematics systems. Children, therefore, should be encouraged to participate in creative art activities that strengthen their comprehension in these areas.

Level II children are curious and want to know the how and why of things

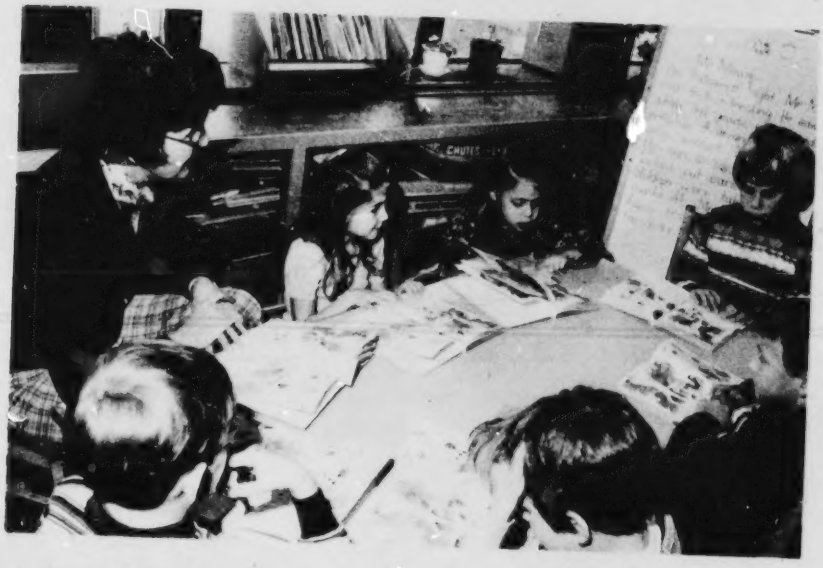
PROGRAM FOR LEVEL II

Six-, Seven-, and Eight-Year-Olds

Goal 1: *Mastery of the basic skills of communication and reasoning essential to live a full productive life.*

(a) Communication skills (e.g., reading, writing, speaking, listening, and viewing)

One of the most important academic achievements for the 6-, 7-, and 8-year-old is learning to read and write. For many of these children, their concept of school is reading. Older brothers, sisters, cousins, and friends went to school and now they can read. Mothers, fathers, aunts, uncles, grandparents, and other adults will ask Level II children if they can read yet. Younger siblings may bring them books to be read.



The children are anxious to learn to read and write

It is important that learning to read and write be a positive experience for the children. They should meet success and feel good about their achievement. They should be challenged but not frustrated. In order to do this, the children will need skill instruction, practice in using what they have learned, encouragement, and many opportunities to talk about, react to, and illustrate what they have written and what they have read.

The program at Level II is an integrated approach. Though much emphasis is given to reading, educators realize that listening and speaking, reading, composition, language usage, literature, social studies, science, etc., are closely related, build upon one another, and cannot operate in isolation. The teacher of beginning reading realizes she or he must start where the children are, help them to widen their world, build their vocabularies, and introduce them to the complex operations of reading and writing. The teacher starts with words and ideas that are important to the children -- their names and addresses, names of their friends, familiar experiences, and the newly tried. In the beginning stages, experience charts are used, captions are written on children's paintings, labels are posted about the room. Games involving rhyming words, like and different sounds, picture matching, and letter matching are used to sharpen children's aural and visual discrimination. The children listen to many stories being read to them, have opportunities for much formal and informal conversation; there is time for role playing and dramatic play. The children are introduced to books, begin to tell stories, and write simple sentences.

The children's vocabularies grow through new words learned on trips, in activities of many types, and through ever more extensive reading. The children are beginning to use phonics and other clues to word recognition. Spelling, capitalization, simple punctuation, and pronunciation and enunciation become part of the curriculum. The children begin to take great pride in their ability to read and write.

During this period the teacher notes those individuals who are having difficulty in grasping ideas, sequencing, decoding and encoding. Diagnoses of difficulties are made through teacher observation; testing; assistance from specialists such as the school psychologist, reading and speech teachers; and appropriate modes of treating problems are tried. It is recognized that the children do progress at different rates and so all children are encouraged, challenged, and led to feel success. Those who are progressing more slowly are given more time, more preparatory experience, and more assistance. Those who are progressing at a very rapid rate are given more materials, more involved activities, and less repetitive instruction.

By the end of Level II, the children have had a wide variety of language arts activities. They have participated in "show and tell," given simple

oral reports, been involved in dramatics and role playing, told and heard many stories, read a great number of books, and written stories, poems, and letters. Many children will have a reading vocabulary of 1500-3000 words in context and a writing vocabulary of 750 words. Most children have attained a good quality of manuscript writing and many will be making fairly legible cursive letters. Most will be using beginning dictionaries, tables of contents, and indices. They use picture and verbal context clues, phonetic and structural analysis to decode unfamiliar words independently. They have learned to recognize the simple types of sentences and to use some punctuation and capitalization.

The children have, in the main, become literate and can read and write. If they have received encouragement and help, if they have found a measure of success, and if they have been provided a challenging, but nonthreatening environment, they are still excited about school. Being able to accomplish the fundamental communications skills has helped them to develop a positive self-image and they are ready to tackle the more difficult, but no less rewarding, learning which will be available to them at Level III.

(b) Computational operations (e.g.,mathematical conceptualization, problem solving, data collection)

Children of 6, 7, and 8 years find a need for mathematics in their daily living. During these years the children have a growing concern for money, time, size, sharing, tallying, and computing. They are developing a sense of mathematics and are beginning to be concerned with exactness. Though often the concepts of time, space, and number are still somewhat vague, the children attempt to get a handle on these by counting, marking off, and recording. They want to know how much longer they must wait for lunch, how many more days until birthdays, who is the oldest, who is the tallest, who has the most, and a host of other quantitative measures.

During Level II, the children deal with mathematical problems of increasing complexity. They master counting through 100, then 500, then reading and writing numbers through 10,000. They learn to add and subtract starting with combinations through ten and working up to addition and subtraction of 3-digit numbers without and with regrouping. They begin multiplication and division through products of 100 using the physical, pictorial, and numerical levels sequentially and progress through to multiplication and division of 2- and 3-digit numerals by a 1-digit number. Work with fractions includes working with physical materials to

develop the meaning of unit fractions 1/2, 1/3, 1/4, 1/5, 1/6, and moving into the introduction of eighths, tenths, twelfths, and sixteenths as well as other than unit fractions (2/3, 3/4). Starting with simple oral problems the children at Level II begin verbal problems involving reading and are introduced to two step problems. The children learn to recognize the common geometric figures and to describe their properties. They master telling time and use measurements such as yard, dozen, teaspoon, ounces, millimeter, centimeter, meter, kilometer, liter, deciliter, and milliliter. They learn to add common measures in both the U.S. and metric systems but do not get involved with converting from one system to the other.

By the end of Level II, the children have a good mastery of addition, subtraction, multiplication, and division facts. They have learned basic computation procedures, problem-solving techniques, measuring systems, and the role of fractions in the world. The mathematical concepts they were introduced to at Level I have now been developed into competencies in working with mathematical ideas.

(c) The logical process of thinking creatively, critically, and constructively in problem solving, evaluation, analaysis, research, etc.

The logical processes of thinking creatively, critically, and constructively in problem solving are learned skills. In order to help children develop these skills, a planned program of experiences must be provided. Such a program should include a sequence of skill development, direct teaching strategies, and opportunities for children to utilize what they have learned.

One of the most important aspects of this process with 6-, 7-, and 8-year-olds is to be sure not to squelch their approaches. Children of this age group often come up with quite creative solutions to problems. Their solutions to large problems are apt to be simplistic, unrealistic, and impractical. However, in their realm of experience, they may make sense. For example, in providing a solution to hunger in far parts of the world, 6-, 7-, and 8-year-olds may suggest:

Make all the people help pick the vegetables.
Make all the people plant gardens.
We should each send them something every week.
Let them come over here to shop.
Help them get jobs so they can buy more food.

These children need help in analyzing their suggestions, in thinking through the possibilities and results of implementation of these, and in realizing the complexity of seemingly simple problems.

As the children explore questions of why and how things are and why and how they work, they begin to analyze, to make hypotheses, and, if given the opportunity, to test theories. Encouraging their natural curiosity will lead them to further exploration and hypothesizing. With careful teacher guidance, the children begin to organize their approach, to examine their hypothesis before acting, and to carefully evaluate what has been done.

The children, ages 6 to 8, need assistance in these processes. They need help in defining problems, examining their components, suggesting possible solutions, testing suggestions, and evaluating results. The more closely these approaches can be taught in meaningful situations for the youngsters, the better. Problems which arise in daily living in the classroom provide ideal situations for teaching and practicing these skills. The use and preservation of materials, the care of plants and animals, the fair use of space and time are examples of problems the children can deal with, given encouragement and guidance.

Along with the problems involved in daily living, the children also begin to attack more abstract problems in relation to subject matter areas. The social studies and science program for the primary grades provide many opportunities for the teaching of problem solving, planning, evaluation, analysis, research, etc. In learning about the family, the neighborhood, and the community, the children look for answers to why and how questions. They begin to observe, to collect data, to compare and contrast, to analyze, and to evaluate. By examining possible outcomes, performing repeated trials and tabulating results, children begin to develop a working knowledge of statistics and probability. Data collection and analysis can be related to questions that really concern children: questions about television, school, sports, clothing, and physical characteristics. They learn to base their inferences and conclusions on facts and to realize that generalizations do not cover all specifics.

The most important facet of these processes at this level is helping the children identify basic problems, and developing methods of approach.

Goal 2: *Ability to sustain lifetime learning in order to adapt to the new demands, opportunities and values of a changing world*

(a) Knowledge of contemporary society
(b) Knowledge of alternate futures
(c) Learning skills
(d) Personal planning skills
(e) Problem defining and solving skills

The society of the 6-, 7-, and 8-year-olds consist primarily of the family, the school, and the local community. Using these as a base, the children learn about contemporary society, changing roles and life styles, and their personal relationship to these.

The children learn about families. They become aware of the different kinds of family groups - one-parent families, nuclear families, extended families. They begin to compare families in different places and different ages. They discover similarities and differences and begin to understand how time and place can effect family make-up and roles of family members.

Level II youngsters learn about the workings of their school. They explore the roles of professional and support staff and their interdependence. They learn about the role of schools and schooling in our society. They are introduced to the concept of public support of schools, school financing, and school boards.

Level II children learn about how the local community operates. This includes not only the traditional community helpers study of but also the interrelationship of one group with another. They learn about the kind of community in which they live (bedroom, light manufacturing, farming, etc.) and the kinds of services and recreation provided.

The children compare their community with other communities (an urban community with a farming community) and with communities around the world. At this level the children's learning is related to present day living in the local community. They compare the games children play, the clothes they wear, the food they eat, and the toys they use in different communities and other parts of the world.

Through these experiences the children come to understand that the type of food, clothing, and shelter people need is determined largely by the community in which they live; that climate tends to determine needs; that resources tend to determine how these needs are met; and that modern technology has reduced differences in living styles.

The children's sense of time is developing. They are introduced to the idea of rapid change -- alternate futures for individuals and for communities. Through comparing the community 20 years previously with the present, they note population changes, urbanization, and occupational changes. Some 8-year-olds will be able to project how the present might have been different for their communities if, for example,

a large manufacturing concern had not moved in or a new highway had not been built. They may be able to project what could happen in the future to change the nature of their communities.

These children can also be led to understand that people change job locations and their profession or trades more often today than they did 50 years ago. In many cases they can use the situations of their own families to illustrate this. Their grandfathers or great grandfathers worked on the same job for many years while the grandmothers reared the children and remained housewives. Their parents may have moved from one town to another to perform the same kind of work or have actually changed the nature of their jobs. They will be able to find examples of women who work outside the house and mothers who have a variety of jobs while rearing children or who change from full-time housewife to worker outside the home when their children are older. They will be able to discuss the job opportunities which were not available 20 years ago. They will be able to find examples of many adults who are attending school and working, a rarity 50 years ago. Some youngsters in the group will be able to project into the future and imagine the kinds and number of vocational changes they might make as adults and the kinds of changes that might be available in 20 years that are not possible at present.

To develop personal planning and problem solving skills, Level II children need opportunities to make choices and time away from the group to do personal planning. The 6-to 8-year-old, in addition to being part of group planning, should have time to sit down on an individual basis with the teacher to talk over personal plans. With the younger children, the teacher may present two or three alternatives, giving the child the opportunity to select the one which is most satisfying. Older children are often able to think of several alternatives on their own, evaluate the advantages and disadvantages of each, and make personal decisions.

Goal 3: *Ability to maintain one's mental, physical, and emotional health*

(a) Knowledge of good health habits and the conditions necessary for physical and emotional well being
(b) Knowledge of the physical and health problems caused by drug addiction and other harmful activities
(c) Knowledge of sound community health practices
(d) Understanding of body processes and functions
(e) Development of physical fitness
(f) Knowledge of safety principles and practices

At Level II health and safety practices should be taught in connection with every school activity. Safe ways of going to and from school are stressed. This includes safe walking routes, rules for crossing streets, bus safety, and bicycle safety. The children are beginning to take more responsibility for personal safety and help to establish the safety rules for the classroom, school, and playgrounds. They understand the need for and cooperate in fire drills and fire prevention. They enjoy making safety posters and reminding each other of the rules. Physical health practices are expanded to meet the needs of growing children. They take more responsibility for washing, having and using a handkerchief, dressing for the weather, and for resting between periods of active play. The school program provides for their growth in developing good eating habits; care of the teeth, eyes and ears; cleanliness; and the need for activity, rest, and sleep.

Children at 6-, 7-, and 8-years learn about preventive and corrective medicine. They learn the need for a balanced diet. They are aware of the necessity for regular check-ups at the dentist. Most have had physical check-ups at the doctor's and have received immunization shots. Many of these children have experienced illness in the forms of colds, upset stomachs, flu, and some childhood diseases. The importance of staying home from school, resting, and following the doctor's advice is stressed. The children are aware of the contagion of certain illnesses and are taught the measures to be taken to help prevent the spreading of disease.

At this age, the positive aspects of drugs are emphasized and the need to use them only as directed is underscored. Children are cautioned to take medicines only on a doctor's advice and warned never to take anything, -- even candy - from a stranger. The results of taking any drugs- even aspirin- on their own are discussed. Some 6-, 7-, and 8-year-olds have been exposed to people who abuse drugs and/or alcohol. The children are encouraged to talk about this and to understand the disastrous effects of such abuse.

Teachers of primary children give much attention to the children's emotional well-being. Each child is respected and made to feel a worthwhile member of the group. Challenges are presented but frustrations are kept to a minimum. Feelings of happiness, anger, embarrassment and sadness are expressed by both children and adults. Acceptable ways of expressing these are developed, such as through role-playing, art work, and music.

Children are made to feel secure in the school environment, gain confidence through achievement, and are unafraid to test themselves against the unknown realizing that a lack of success is not considered failure.

The children need a regular routine of physical activity

Children of 6-, 7-, and 8-years are growing and have need for a regular routine of physical activity. They find it difficult to sit still for long periods of time and need freedom to move as they go about their work. In addition to this, they are provided a program of physical education. This program includes time for learning physical skills, group games, and individual activities. Rhythms, dances, team activities, and miscellaneous sports are included. Much of the time these activities are carried on out-of-doors.

By the end of Level II, children should have a good understanding of sound health and safety practices, have developed basic health and safety habits, and have begun to accumulate the content of health and safety education.

Goal 4: *Understanding of human relations - respect for and ability to relate to other people in our own and other nations - including those of different sex, origin, culture, and aspiration.*

(a) Respect for and knowledge of other social, cultural, and ethnic groups
(b) Understanding one's relationship to his natural, economic and social environment
(c) Respect for the community of man
(d) Understanding of home and family relationships and involvement in the home, community and society in general

Human relations skills, like other skills, need to be developed. Level II children have a natural curiosity about other people. This makes Level II a prime time for the development of the understanding of human relations.

Children of 6-, 7-, and 8-years are concerned primarily with their immediate environment. They are accepting more responsibility in the home and are establishing growing relationships with other members of the family. In school, the children are exploring relationships with peers and adults and beginning to make a few special friends. They are beginning to know the neighborhood and are given more freedom in moving about it.

The Level II program builds on this developing awareness and broadens the children's understandings and experiences. Differences in the cultural background of children in the group are explored. Activities include sampling food of various cultures, learning about special customs, listening to ethnic music and sharing of information through discussions, art work, role playing, and stories. Children are led to recognize similarities and respect differences.

The social studies program at Level II centers about the family and community. The children compare families by reading or hearing stories about different families, talking about their own families, examining and making pictures of families, creating stories about families, and by role playing. Teachers are careful to stress that there are different kinds of families - nuclear families, extended families, one-parent families, etc. - and that each is as acceptable as any other.

The children explore the community and begin to investigate some enterprises in depth. They take trips throughout the neighborhood noting businesses and services available. They visit some of these to learn more about the services provided and the people working there. They investigate one neighborhood enterprise which is a public service such as the telephone company; one that is a local municipal service such as the local police and the school itself; one that has to do with the production of food, clothing, or shelter. They learn about boats, trains, automobiles, and airplanes as transportation of people and goods. Through trips to nearby places, classroom activities, and discussions the children develop an understanding about the interrelatedness of living in the community. They obtain a well-rounded view of the work carried on by people in the neighborhood who supply food and clothing, who build houses and other buildings, who provide building materials, who supply fuel and

light, who care for health needs, who protect the environment, and who protect property and welfare.

The children compare their community with communities in other parts of the United States and in other parts of the world. The children's learning is related to problems of present day living in their own community, and to their own firsthand contacts and experiences. Teaching is directed at helping the children gradually come to understand that people are all much alike; that the type of food, clothing, and shelter that people need and use is conditioned largely by the community in which they live; that climate tends to determine people's needs; that people are learning ways of controlling their environment; that the differences in the way people live throughout the world are somewhat modified by invention, transportation, and communication.

The children learn about people from other times and other places

By the end of Level II, the children have explored many different cultures and communities. They have had discussions and firsthand experiences, heard and read stories, painted pictures and murals, watched movies and filmstrips, constructed models, role played, and used simple textbooks in learning about people. Their teachers have given them guidance in relating all learning to themselves and to their relationships with other people.

Goal 5: *Competence in the processes of developing values, particularly the formation of spiritual, ethical, religious and moral values which are essential to the individual dignity and a humane civilization.*

(a) Knowledge of the diversity of values

As the children's world widens, they meet many people, both children and adults, with different values. Neatness may be important to one parent and unimportant to another. One child may feel it is important to have many friends and another child may want only one or two friends. Some children go to religious instruction, others do not. The physical education teacher may encourage cheering for teammates in a ball game, the classroom teacher may discourage the same behavior in a spelling bee.

Through contact with and stories about other people, the young learner is introduced to an evergrowing variety of value structures. The ideas they feel are important, that members of their families feel are important, and those that others feel are important will lead the children to understand their own developing values.

(b) Skill in making value-based choices

Children at Level II stage of development have had much experience in making choices. They are beginning to develop an understanding of the cause-and-effect relationship, but are not always mature enough to act accordingly. Therefore, they need guidance and practice in making decisions.

The teacher should provide opportunities for the consideration of the results of decisions on the decision-maker, and of the effect the decision will have on others. Through role playing and other vicarious experiences, children can experiment with decision making, and find out "what it feels like" to make both "good" and "bad" choices. The young learner should be encouraged to generate several realistic possibilities before coming to a conclusion. This not only promotes creative thinking and problem solving skill, but allows the child to realize that life usually presents several cloudy alternatives, not crystal-clear dichotomies. Additionally, the ability to accept the results of a poor decision gracefully

can begin to grow at this time. Teachers of Level II pupils can create a class atmosphere that encourages exploratory behavior and a healthy attitude toward failure. (The persistence of inventors is a good example here.)

Once decisions have been made, the child should be helped to carry them through. Emphasis should fall on the processes of decision making as much as on the resulting product. Thus, if a choice leads to a disappointing end, the child should be guided in rethinking the problem, and examining the information and attitudes upon which the decision was made. While the teacher should, of course, intervene to prevent serious harm or damage, it is important to restrain the impulse to change a child's direction when poor results are foreseen. The opportunity for the pupils to recognize their own mistakes and decide what to do next is an important part of the growth process.

(c) Commitment to one's own values and acceptance of diversity of values in society

Accepting responsibility for one's decisions and building commitment to a personal set of values are complementary concepts. Teachers can show respect for and reinforce commitment to personal values by guiding children to display them in acceptable ways. Activities such as viewing films, reading stories and role playing will show children how to maintain their own values without injuring the rights of others, and will encourage them not to let peer pressure be the dominating force in their decision making. Children at this age must be cautioned against overenthusiasm for making the "right" decision which can lead to overbearing and self-righteous attitudes.

While developing a commitment to their own values, children should grow in acceptance of the diversity of values in society. Children at 6-, 7-, and 8-years are keenly aware of differences between those around them. During these formative years it is critical that the proper attitude toward differing values is fostered. A step toward promoting attitudes based on understanding can be made by exploring with the children the reasons why people hold the values they do. By telling what is important to people, a feel for the basis of value systems can be built. A dentist would offer apples, not candy, at Halloween; a fourth grader might save movie money to buy a gift, or donate to charity; a class might use paper wisely and recycle waste. Building on such examples, the children can begin to realize that little in life is black and white, each person confronts dilemmas in different ways, thus creating a diversity of values in society.

Goal 6: *Knowledge of the humanities, social sciences and natural sciences at a level required to participate in an ever more complex world.*

(a) Knowledge of basic methods of inquiry in each field

By ages 6, 7, and 8, the natural curiosity that children brought to school has usually deepened and focused on particular topics. Also, as the children increase in academic skills, they are more able to proceed effectively in answering their own questions. Therefore, this is an appropriate time for them to learn some basic methods of inquiry.

Most science programs provide many activities that call for use of simple scientific methods. After structured experiences in observing, measuring, classifying and general problem solving, children are ready to attempt suggested activities, or generate their own. Through experiences in both the biological and physical sciences, pupils can be led to see how an organized methodological approach will contribute to easily understandable, more reliable results.

While basic problem-solving methods apply to the social sciences, additional skills can be used to promote understanding. The use of reference materials, library resource films, pictures, and human resources are ways people find out about other people. Viewing art work, listening to music, and eating food of different cultures allows the learner to go beyond the level of factual information and personally experience aspects of the life of others. The basics of map use and geography can be introduced at this time.

Components of the humanities provide opportunities to develop critical thinking skills. Interpretation of poetry and literature, and skills used in creative writing call upon the use of analytical and interpretive abilities.

By increasing their ability in basic methods of inquiry, the pupils can become more independent learners, can better rely on their own judgment, and will therefore be better informed members of the ever more complex world.

(b) Interdisciplinary efforts to focus knowledge on problems

The program for 6-, 7-, and 8-year-olds is basically interdisciplinary. Though much attention is given to the basic skills of communication and mathematics, the children continuously use these developing skills in

problem-solving situations. In learning about the family and the community, the children read and write stories about them, paint pictures, build models, role play, take and view photographs, and make and listen to tapes. As the children pursue these activities and as teachers provide guidance and suggestions, it is often difficult to isolate the particular subject the children are working on. Reading, writing, social studies, science, art, music, and mathematics may all come into play as the children come to understand the community in which they live.

At ages 6, 7, and 8, children can understand that natural resources are necessary for manufacturing, yet many factors need to be considered in deciding whether trees will be made into furniture, houses, or boats. The influence of scientific knowledge, economic conditions, and consumer tastes can all be illustrated with examples familiar to today's youngsters. Art forms are expressions of and reactions to the world around us. An interdisciplinary approach presents and relates the content and medium of expression.

A large portion of the children's day is interdisciplinary

At times, particular lessons in reading, writing, mathematics, music, art, science, social studies, etc., are presented and at times the children concentrate on the mastery of specific skills. However, a large portion of the children's day is interdisciplinary. This approach helps the children begin to see how their repertoire of basic skills and knowledge can be blended and applied to the understanding of the forces governing all human activity.

Goal 7: *Occupational competence necessary to secure employment commensurate with ability and aspiration and to perform work in a manner that is gratifying to the individual and those served.*

(a) Developing work skills and habits

Development of work skills and habits begins very early. Emphasis at Level II is on the development of good work habits and the development of interpersonal relationships. The 6-, 7-, and 8-year-old child learns to:

- use materials with care and conservation
- clean up after oneself
- start and finish a task within prescribed times
- have necessary materials available
- plan one's time
- take pride in a job well done
- know when neatness counts

The child shows developing independence through:

- ability to work alone
- ability to seek advice and counsel when necessary
- ability to question and seek answers
- ability to perceive constraints and work within them
- ability to bring one's own resources and talents to work and play

The child's development of interpersonal relations is evidenced through a growing ability to:

- accept responsibility to the group
- see and build on strengths of other members of a group
- accept and fulfill a leadership role in a group
- accept and fulfill role of a follower in a group
- recognize and accept one's ability to work and play better with some than others
- recognize and accept the responsibility of sometimes working and playing with individuals other than best friends
- develop the concept of when and how to stick to one's view and when and how to compromise
- perceive the task of the group and one's relationship to it

(b) Developing awareness of work opportunities

The child is continuously exposed to the world of work. Television and daily living display a wealth of work opportunities to the child. Attention should be called to them; the child should be helped to understand the importance of each job, and how each worker meets the needs of individuals and society. By itemizing the occupations and responsibilities of parents and others, pupils can begin to see the diverse types of employment available.

All subject area in the elementary school can be used as a background for career discussions. Every field has its outstanding contributors (scientists,

authors, musicians, artists, actors, explorers) and children can readily relate to people whose work is familiar.

Also to be included are investigations into the less obvious jobs:

- those that are non-prevalent in the pupil's locality
- specific types of occupations often categorized under a generic title (farming - dairy, beef, chicken, fruit, vegetable, grain)
- jobs that may attach themselves to many industries (bookkeeping, secretarial, custodial service)
- positions "behind the scenes" that aid in the presentation of a product or service (camera technicians; news writers and designers for magazines, papers, theater, and television; laboratory technicians)

The relatedness of one industry to another is also important at this level A discussion begun about a local grocery store can show how a business person depends upon the building, transportation, meat-packing, farming and even paper industries in order to serve his customers. A discussion about the movies can include writers, film editors, camera technicians, set designers, and directors as well as local theater managers, ticket takers, etc.

Children of 6-, 7-, and 8-years will have no difficulty naming many occupations. Careful guidance will help them realize the difference between service and production type jobs. The intrinsic value of both should be clarified and discussed, along with the differences in responsibilities between the two types.

In our rapidly changing world, care must be taken to avoid the old career stereotypes and not to begin new ones. Sex, age, or race must not be shown or implied to be barriers to any work opportunities.

All children have ideas of what they want to be when they grow up. Projects which allow for in-depth study of several aspects of an occupation will give the pupils a greater awareness of the job's responsibilities. The academic and social skills required for proper job performance should be related to the daily curriculum of the pupils. Nurses, for example, might work in hospitals, operating rooms, doctors' offices, schools, factories, or do private duty. They need to be proficient in math, science and reading to properly administer medicine, apply bandages, or provide first aid. Nurses must deal with people who do not feel well, reassure frightened patients, and be firm about rules. Other careers also require academic and social skills. Factory workers must be able to follow directions carefully, and be precise in their work. Fairness and care concerning

shop regulations create a pleasant work environment for all. Reading and mathematical skills along with problem-solving abilities, make a worker better able to do his job.

While children should not be expected to hold adult views of things, they can be helped to see the realities of day-to-day work situations. From their own experience pupils can cite examples of smooth and rough situations.

A discussion of the role of "student"as an occupation, with its accompanying rights and responsibilities would be another way to help 6-, 7-, and 8-year-olds grasp the meaning of the concepts involved. Positive and negative aspects might be discussed. Children need to see that in all phases of life there are both pleasant and unpleasant things that need to be done. Positive aspects should compensate for negative.

Accompanying the study of occupation selection is the investigation of the training necessary to achieve the occupation. At Level II this inquiry is brief and general, serving simply to make students aware that every occupation requires specific preparation- formal or informal, long-term or on-the-spot.

(c) Occupation selection

At Level II, children do not become involved in occupational selection per se. However, their awareness of the wide range of possible occupations sets the groundwork for later selection. The children's horizons are widened and they are made to feel that almost anything is possible. This is the age when children's self-concept is developed and strengthened. Only their own developing ability to analyze personal strengths and weaknesses should determine what they might be when they grow up.

(d) Occupational training and retraining

Level II youngsters also become aware of the need for retraining. Retraining is related to the need or interest of a worker to change his area of occupation. This might result from the relocation of the worker, elimination of the current job, or a return to the work force after prolonged absence. Retraining for greater specialization or administrative level advancement is included.

Capitalizing on the natural interest of 6-, 7-, and 8-year-olds to role-play adult situations, teachers can create a foundation of concepts on which can be built more advanced understandings of how to insure one's own occupational competence.

Goal 8: *Knowledge and appreciation of our culture and capacity for creativity, recreation, and self-renewal.*

(a) Knowledge of major art, musical, literary, and drama forms
(b) Appreciation of the diversity of mankind's historic and cultural heritage
(c) Appreciation of beauty
(d) Development of individual talents
(e) Wise use of leisure time
(f) Promotion of increased use of and appreciation for community resources (museums, historical sites, performing arts groups, etc.) that reflect our cultural heritage and achievements

The arts play a major role in the program at Level II. Children of 6-, 7-, and 8-years are highly involved in dramatic play, painting, building, sculpting, singing, listening to music and stories, reading and writing. They have active imaginations and like make-believe and pretending. They express themselves through the arts and reinforce learnings through these activities.

Tha program at this level provides opportunity for the children to use many art materials. There is opportunity for painting and coloring, for modeling in clay, wood, and other materials. Sometimes, the children's art work is closely related to other areas of the curriculum and sometimes their art work is purely creative expression.

Some of the children's art work is creative expression

At the beginning of Level II, the children's fine muscles are still immature, and their art work is in a stage of development. They move into the symbolic stage and by the end of Level II, most of these children have moved into the representative stage.

These are the critical years in the child's art development. The teacher does not hurry the children to express their free-flowing ideas in painting and drawing or in the crude objects they make. Creative work is encouraged, and not stifled by the imposition of adult standards and techniques.

The teacher does offer guidance. She or he, by informal suggestion as she or he moves about among the children, is teaching them how to use their brushes in different ways. He or she helps them to select the right medium for a particular job and offers suggestions and encouragement.

Level II children are given opportunities to participate in art activities associated with the field of media. They work with super-8 cameras, still cameras, Polaroids, video equipment, and tape recorders creating image material and recording the environment.

When the children begin to reach out for techniques, the teacher is nearby with suggestions. When space begins to trouble the children, when the near and far of things begin to be a preoccupation, the teacher provides technical assistance. The teacher helps the children realize that things close by look larger than the same things farther away and things on the ground that seem to go into the distance are placed higher on the paper and drawn smaller. These simple techniques are called to the attention of individual pupils who are ready for them, usually near the end of Level II. The teaching of formal art principles is not a focus of the program.

The music program at Level II includes singing, moving to music, playing classroom instruments, and learning to listen to music. The children sing songs about home, school, and neighborhood; songs of the seasons and special days; and patriotic songs. They play rhythm instruments and simple melody instruments. They may work out their own orchestrations and compose melodies on the piano and on their melody instruments. The teacher guides the children through their musical experiences to an awareness of the elements of melody, rhythm, harmony, form, expression and style. He or she helps them feel the rhythm in music and an awareness of melodies that move step by step, that skip, and that have similar phrases. Simultaneous sounds and stylistic use of volume and tempo are explored.

The school program provides opportunities for the children to begin to explore and to discover the elementary aspects of musical notation. They become familiar with the printed page of music. By the end of Level II they may use simple, familiar songs in their music books, which they can already sing by rote, as the basis for their first reading of musical scores.

The children also use music in relation to other activities. Dancing, singing, and playing rhythm and melody instruments permeate their units of work. They may make musical instruments such as drums and rattles. They learn folk dances from other cultures. They use music as an integral part of skits and shows.

Some Level II children begin instrumental music instruction

The children create plays and skits to perform for their classmates. They learn roles for performances for larger groups. They use puppets as an art form. Except for a formal school play in which the child may participate, most of their drama is informal and ad-libbed. The structure of the skit is directed, but time is not spent memorizing roles. Rather, the children have many and frequent opportunities for brief performances for their classmates. Simple costumes, scenery, and props are made by the children as needed to add to their performance.

Level II children experience various literary forms. They read and write stories and poems. They learn to gain information and insight from non-fiction and to express their learnings in non-fictional reports. They learn to write letters and essays. They read short news reports and learn to write them. They begin to develop an understanding of the need for and the use of various literary forms.

Children of Level II experience music, art, drama, and literary forms as unique areas of investigation and in conjunction with other areas of the curriculum. They paint murals to illustrate what they are learning in social studies or science. They perform skits illustrating occupations found in the community. They learn songs and dances associated with particular holidays. They read and write stories and poems about the people they are learning about. They begin to view the various art forms as ways to express feelings, as ways to communicate messages, and as ways to illustrate learnings. They use the various forms in isolation and in combination.

The children are exposed to professional works of art, music, literature, and drama. These are chosen carefully keeping in mind the children's stage of development, but it must be remembered that being childlike is not antithetical to being artistic. The kinds of activities which are provided for 6-, 7-, and 8-year-olds include:

- Listening to records - music and literature
- Listening to stories being read and told
- Viewing sculpture, paintings, etc. displayed around the school (these may br borrowed from museums, libraries, etc. to provide variety)
- Attending concerts, dances, and dramatic performances in their school and community
- Visiting libraries and museums
- Watching artists at work
- Observing natural beauty such as flowers, snowflakes sunsets
- Noticing the artistic creations such as architecture parks, and design in clothing and furnishings

At Level II, the children participate in structured dramatics

Goal 9: *Understanding of the processes of effective citizenship in order to participate in and contribute to the government of our society.*

(a) Knowledge about political, economic, and legal systems with an emphasis on democratic institutions and on the global interdependence of these systems

By the time a child reaches Level II, he or she has some experience and knowledge of the political, economic and legal systems of our country. Through the school curriculum, these experiences are discussed and viewed as part of the system to which they belong. For example, the concept of voting is introduced when pupils raise their hands to indicate preference. During election periods, children are aware that adults may vote for candidates. For older children at Level II, extending the ideas of our political system to include major offices (president, vice president, governor, mayor) is appropriate, as is discussion of the fact that laws are often created by popular vote. The term democracy is introduced, and the democratic system is compared to other systems.

The social studies curriculum for the primary grades focuses on community life. Through these learnings an understanding of economics can be built. Children use money for personal items, school lunches, gifts, etc. They know that workers get paid, and that few things are free. Young children can be helped to realize that business people do not pocket sales receipts, but must buy merchandise, pay employees, and meet other expenses. Playing store and investigating adult careers adds to the knowledge of our economics system.

Children of 6-, 7-, and 8-years are very familiar with some of the outward symbols of our legal system (police cars, uniformed officers) and less familiar with others (judges, courts, legislatures). They know laws exist and violators can be punished. Through school activities, young learners should expand their knowledge to include the general idea that laws are enacted by elected officials (rather than by one person), and that the court system gives an accused person the chance to defend her or his innocence.

(b) Knowledge of the American political process at national, State and local levels

The 6-, 7-, and 8-year-olds, understanding of the American political process is developed mainly through practice. Some attention is given to the election process around Election Day. Holidays are used to learn about important events in the building of our country. Major news events are discussed and their importance explained. However, it is through every-day living in the classroom that the children learn what it means to live in a democracy.

At Level II, the children learn about their basic freedoms, rights, and restrictions through real experiences. They should be encouraged to voice their opinions, ideas, criticisms, and suggestions and, through this, become aware of the meaning of the freedom of speech. Their right to a fair hearing emerges when the teacher serves as arbitrator in controversies and listens to both sides of the story. Their right to privacy is learned when

the teacher is careful to ask permission before going into the child's desk. The need for rules becomes obvious as the children work and play together and the rules are established by teachers and children together. The need for law enforcement is also quite obvious to Level II children and the teacher occasionally must play this role.

At times it is necessary for a teacher to operate in an authoritarian manner. Children faced with non-democratic situations, learn to recognize and reconcile them.

(c) Knowledge about taxation and fiscal policy

Children of 6-, 7-, and 8-years have some awareness of taxation. They know that when they go to the store, the price of their purchase does not include tax and they have to pay more money than the marked price. In addition, they have heard their parents talk about school taxes and income taxes.

Teachers help expand the children's understanding of taxation. In studying the school and community, the children learn which services are made available through taxes. They learn what a budget is. They learn that their parents vote on school bond issues and school budgets.

(d) Acquisition of citizenship skills:

1. Decision making
2. Group participation
3. Leadership and "followership"

Children develop citizenship skills through opportunities to practice them. Six-year-olds begin to learn citizenship skills through planning activities. They begin each day with a planning session under a great deal of teacher direction. The teacher must at this stage give a great number of suggestions and ask many leading questions before the simple plans for the day are written on the chart or chalk board. These youngsters have many work periods in which they are expected to engage in the kinds of activities and give the kind of consideration to their classmates which they have decided upon in planning sessions. They have frequent discussions after work sessions to evaluate how things went, what problems they had -- such as someone did not put the blocks away in the proper place or someone spilled the paint and didn't wipe it up; or Robert got along very well with Paul and Ruth today as he helped them build a structure. These discussion sessions help the pupils develop a group feeling as well as learn to plan and evaluate.

Youngsters at 6 take responsibility for simple chores in the classroom such as dusting, watering the plants, distributing and collecting materials, and serving as messengers. By the time these youngsters are 8, they should be engaging in these same activities with much less direction from the teacher and they assume more responsibility for their own behavior. They are given a larger share in planning. They set group goals better and evaluate more fairly. They can make plans and evaluate a day's work instead of after each activity. Having planned and organized their activities under each direction, the children move easily into more group work

than they could manage when they were 6. They are more likely to assume the responsibility of their accepted tasks and stick to a job until it is completed. Their work periods are longer for the most part. By this time most are ready to assume roles of committee leaders and committee members. The establishment of orderly routines is very important for these children. They participate to a greater degree in establishing these rules and regulations than they did when they were 6 and 7. They can assume a greater responsibility in the housekeeping chores of the room than when they were 6.

At 8, they can conduct some of the routine activities which are directed by teachers of younger children. These activities include taking attendance, making announcements, leading the salute to the flag, etc. They began to assume more of a role in running their classroom as a mini-society. In addition to more participation in school-wide activities, 8-year-olds perform services for the larger school community such as serving as messengers for the principals office, distributing milk to the younger children, keeping a section of the playground clean, participating in various school-wide drives and campaigns.

The children begin each day with a planning session

Goal 10: *Knowledge of the environment and the relationship between one's own acts and the quality of the environment.*

(a) Awareness of one's relationship to the environment

To the 6-, 7-, and 8-year-old, the environment has a very immediate, if not broad-ranged impact. Rain means indoor play, but puddles and possibly a rainbow for compensation. A new house going up on an empty lot takes away the ball field, but promises new playmates. Through exploration the children learn what things in the environment they can change (dam a small stream, shovel snow off a pond, pull weeds from the garden) and which aspects of the surroundings are immune to their actions (the weather, large natural and man-made things).

The children interact with living and nonliving things

Daily interaction with the living and nonliving things leads the children to develop concepts regarding their relationship with the environment. Adults can capitalize on these everyday encounters to help the learners see their place in the natural world. Although simple cause-and-effect relationships can be understood by Level II children, they often must be pointed out. Through real-life experiences, youngsters can be guided to the understanding that all in nature serves a purpose, and their own role should be one of cooperation and stewardship.

(b) Preservation and wise use of resources

The need for wise use of our country's resources is an accepted fact. For some, this means a rethinking of values, a change in lifestyle; for others the impact is less drastic. Children at 6, 7, or 8 years hardly had a hand in creating today's world, but the same factor of age is what lies in their favor, for with them rests the environment of the future. Through proper instruction and guidance, the children of today can be taught to value the wise use of resources. In the classroom, teachers can set an example by encouraging the class to use materials carefully, planning for minimum waste and finding a way to use scraps. Children should be taught to minimize energy use by turning off electrical equipment and lights when not needed, and keeping doors closed to heated or air conditioned areas. Places should be provided for the collection of recyclable materials.

In addition to activities in school, the children should be encouraged to implement their environmental values at home. Discussion of films, books, and the pupils' own ideas can lead to ways of preserving the natural surroundings of their home, school and neighborhood. Emphasis should be placed on prevention. If people use trash containers, streams and fields will not need cleaning. Proper maintenance (bicycles and toys) and complete use of materials (pencils, notebooks, crayons) extends increasingly scarce resources.

To the children at Level II, the future is a long time away, and the world is still viewed with a self-centered eye. Too often ideas of resource conservation are conceived of as a need for sacrifice and self-denial. Therefore, it is necessary to help children understand that the wise use of expendable goods is its own reward because it provides for the availability of materials both now and later.

The children learn the wise use of expendable materials

LEVEL III

Level III children are becoming independent learners

WHAT THE CHILDREN ARE LIKE

Nine-, Ten-, and Eleven-Year-Olds

LEVEL III

By Level III the eye-hand coordination of most youngsters is good and improvement begins to appear in their handwriting. Their eyes have matured and are capable of close work with little strain. It is at this level that girls begin to become more advanced in physical development than boys and this difference becomes more pronounced as they proceed through elementary school. Teachers who work with 10-year olds will find that a few of them are moving into preadolescence. These changes are often reflected in their behavior before the physical changes are evident. Their moods may change rapidly. Their interests in school activities may wax and wane in a way that can be very disconcerting to teachers and parents.

Those teachers who work with 11-year olds will find a wide range of physical development. There is the group who are still children in the sense that they make slow steady growth. Their interests and needs are much the same as those of the 10-year-olds. These children remain childlike in appearance. The other group is composed of those children who have begun a new pattern of rapid growth and are developing secondary sex characteristics. The boys in this group sometimes have much in common with their gang-conscious classmates, at other times withdraw completely from their former classmates. They begin to show interest in girls. The girls in this group begin to show interest in the boys and the little cliques of younger girls no longer seem to be as important as they once were. They may make new friends -- usually preadolescent girls. Both boys and girls may seem to be very mixed up children. The teacher who deals with these divergent groups needs to be understanding and informed about the needs of these preadolescents. Those who are maturing need help to understand themselves and both groups need help to get along with each other.

In terms of their new social development, most youngsters at Level III are fairly responsible and dependable. Most 9-year-olds want and need a great deal of affection from parents and teachers even though they are not so dependent upon them as the average 7- or 8-year-old. They continue to reach out for independence until they regard this escape from adult domination as very important when they reach preadolescence. At this stage, if they are not accorded the responsibility for making decisions which they think they are due, they are likely to become rebellious and resentful.

The interest in gangs and clubs which for many youngsters started in Level II is continued and intensified in Level III. They enjoy 4H Clubs and other organizations. They are interested in team sports. They are especially interested in learning new skills like cooking, sewing, bicycling, swimming, and skiing. Musical skills are increased through choral singing and instruction in orchestra instruments.

Many children at this level want to be as much like their peers as possible in dress, manners, and speech. With their peer groups they are conformists which means they are likely to be nonconformists in the eyes of their parents and teachers.

Level III children are interested in learning new skills

PROGRAM FOR LEVEL III

Nine-, Ten-, and Eleven-Year-Olds

Goal 1: *Mastery of the basic skills of communication and reasoning essential to live a full and productive life.*

(a) Communication skills (e.g., reading, writing, speaking, listening, and viewing)

By the beginning of Level III, most children have mastered the rudiments of communication. Through consistent instruction, they have learned word attack skills, acquired a sizable vocabulary, sharpened their audio and visual discrimination, and have learned to use various modes of communication. They become skilled in identifying and using root words, prefixes and suffixes, inflectional endings, compound words, and syllabication as word attack skills. They add new words to their vocabularies, through ever-widening areas of interest and investigation. They learn and use precise terminology in social studies, science, mathematics, and other areas of the curriculum. They become aware of denotation and connotation of words and recognize and use a wide range of synonyms and antonyms.

The children read for information and for pleasure

The 9-, 10-, and 11-year-olds learn to identify main ideas, draw conclusions and make inferences, and to recognize and use details to support ideas. They read for specific information, for general understandings, and for pleasure. They write compositions and essays to share what they have learned and to defend their opinion. Listening and speaking skills are strengthened through large and small group activities. They use fictional forms of writing to express their feelings, views, experiences, and imagination. They expand their use of other media of communication such as film, photography, tapes, drama, and puppetry.

By the end of Level III, most children have gained a basic mastery of the English language. Through encouragement, guidance, direct and indirect instruction from their teachers, the children have grown in their ability to utilize all forms of communication. They have examined the structure of the language and have become competent in the use of both oral and written language. They have learned to use and interpret punctuation, various forms of prose and poetry, build and analyze sentences, paragraphs, and longer passages; to make wide use of visual forms to gain information and to better communicate their own thoughts and ideas; they have learned the importance of correct spelling, good penmanship, and careful sentence construction.

More important, however, by the end of Level III, the children have met with success and are willing to accept new challenges. They have discovered the joy of reading, writing, listening and speaking. They have found that mastery of the basic skills of communication make it possible for them to explore any area of interest; to find out about people, places and things; and to express themselves clearly, interestingly, and convincingly. These children still have much to learn. Their skills will need to be refined, their approaches smoothed, their understandings deepened. Yet, they have come a long way, the foundation has been built, and if it is a strong foundation they have a positive attitude toward themselves and their abilities.

As the children progress through Level III, an ever-increasing range of achievement is noted. The majority of the children make consistent steady progress and fall in the middle range for their age levels. Some children, however, progress slowly and need more reinforcing experiences. Other children progress at a very rapid pace and need more unique experiences to challenge them.

During Level III, those children having difficulty with the basic communication skills, continue to receive special attention. Where necessary, remedial help is provided, new approaches tried, and assistance from specialists sought. Every effort is made to see that these children do learn to read, write, and find success. Their strengths are emphasized, and their self-images built. They are continuously encouraged and their parents are called upon to help provide support and assistance. If some of these children continue to fall behind, they need to be examined for special causes since the child who leaves Level III without acquiring proficiency in the communication skills will find the educational process more and more difficult.

(b) Computational operations (e.g., mathematical conceptualization, problem solving, data collection).

While mathematics is more and more a part of every school activity, at Level III basic skills are still being built. The 9-, and 10-, and 11-year-old child becomes involved in rather abstract mathematics, complex problems, and difficult computations. Though many children at this level rely on actual objects or picturalizations in order to explain a process or to grasp a new idea, they do deal with many more abstract ideas now then when they were younger. When encouraged and given non-didactic guidance, they

accept the challenge and gain pride in working with difficult number combinations and complex mathematical processes. The 9-, 10-, and 11-year-old is often fascinated with the history of numbers, measurement systems, and the development of mathematics.

During Level III, the children master the counting, reading and writing of numbers in the Arabic numerals through 1,000,000,000 and in Roman numerals through MM. They are introduced to the use of exponents, using powers of ten as another way of naming Arabic numerals, and the multiplicative bar for expressing large numbers in the Roman system ($\overline{XX}$=20,000). The 9-, 10-, 11-year-old child becomes competent in computation of whole numbers, uses algorithms, estimates, checks results through a variety of methods, and uses numbers to solve problems.

Level III children continue to explore operations of fractions. The children grasp the meaning of common denominators and learn how to determine the least common denominator. Beginning with common fractions with common denominators, they eventually learn to add and subtract fractions with unlike denominators. They are gradually introduced to multiplication and division of fractions through a variety of processes. Level III children use many diagrams to illustrate the operations of the processing fractions.

Knowledge of decimal fractions is expanded at Level III. Children have already had some experience with decimals in the context of money. Now, however, they use decimals as fractions, in measurement work, and as equivalents to common fractions. They learn to add, subtract, multiply and divide decimals. They are introduced to the concept of percent and compare common and decimal fractions to percent.

Children at Level III begin to use the terminology related to common geometric figures, find perimeters and areas, explore volumes of rectangular solids, and use a compass, protractor, and straight edge. They use units of length, liquid measure, dry measure, time, weight, and money in the U.S. system and units of length, liquid measure, and mass in the metric system in calculations and problem solving.

The use of verbal problems involving reading and the development of mathematical reading skills are continued throughout Level III. The children encounter increasingly more complex problems and become involved in analytic problem solving activities. They learn to use scale drawings, tabular arrangements of numerical data, line and bar graphs, and time tables.

By the end of Level III, the children have been introduced to and achieved a degree of competency in basic mathematics. With this foundation they are able to use mathematics in their daily lives and are ready to explore the more specific branches of mathematics.

A large number of concrete experiences during Level III will assist the further development of abstract thinking that will occur later. Although many children are ready for a great deal of abstraction at this age, conceptual development still occurs through the gathering of a large amount of information during direct experience.

(c) The logical process of thinking creatively, critically, and constructively in problem solving, planning, evaluation, analysis, research, etc.

Much emphasis is given to problem solving at Level III. Many of the activities that the children are involved in require research, analysis, creative and critical thinking. Their work in each area of the curriculum revolves around questioning, finding out how and why, and resolving dilemmas.

Teachers of 9-, 10-, and 11-year-olds help the children to recognize conflict situations. They raise open-ended questions and encourage the children to express their opinions and feelings. Ideas are explored and information sought to support or negate them. Various approaches to problem resolution are elicited, the feasibility and suitability of each is discussed and appropriate avenues followed. The children learn to gather pertinent data, examine it, and organize it around hypotheses. The children are guided in testing hypotheses, arriving at conclusions, and stating generalizations.

Many activities require research, analysis, creative and critical thinking

An important phase of the problem solving process at Level III is research. Children learn to use various reference books including atlases and encyclopedias. They learn to use tables of contents, indexes, chapter headings, and title pages in seeking pertinent information. The card catalog is introduced and children learn to locate materials in the library. In addition, the children are guided in using community resources, people resources, and audio-visual materials to gain information.

When children first begin to research a topic, they need much guidance in locating relevant information. They often have difficulty narrowing a question to manageable limits. A topic such as "The Early Romans" needs to be broken down into components such as "The Government of the Early Romans" or "Clothing of the Early Romans."

As the children gather information, they are encouraged to continuously raise questions, make hypotheses, and continue to investigate further aspects of the problem. In researching "Clothing of the Early Romans," children should be asking: "What were the clothes made of? What types of clothing were worn? Did men and women dress alike? How were the clothes made?" Such questions lead into a collection of data from which the children are able to draw some conclusions, make some inferences, and draw some generalizations. These questions also open up other areas of investigation for the children to explore.

The children utilize many resources to gather information

Goal 2: *Ability to sustain lifetime learning in order to adapt to the new demands, opportunities, and values of a changing world.*

(a) Knowledge of contemporary society
(b) Knowledge of alternative futures
(c) Learning skills
(d) Personal planning skills
(e) Problem defining and solving skills

Children at this level are ready to begin a serious study of contemporary society and take a serious look at possible futures. Their knowledge of other communities is much wider because of television, movies, and in many cases actual travel. Many pupils are fortunate to have citizens of other countries living in their midst. At the same time it must be kept in mind that their community is still primarily the school and the local neighborhood.

The children should continue to study the operation of the school and to be involved in it. They should learn who makes decisions about public education -- the roles of citizens, the board of education, the state and federal government. They become more informed about their local communities - a study of the local government is facilitated through visits to city council meetings and the courts as well as the local newspaper and radio or TV stations, etc.

At this level, as they move out to compare different communities with their own, they can handle more difficult and complex problems than youngsters at Level II. They learn more about the history of the United States as a basis for better understanding today's conditions. This is not a detailed study of the rise and development of our democratic civilization such as will be undertaken by young people in junior and senior high school. It is a simple story of our people. It will include lives of famous Americans. They will learn the adventure and hardships faced by those who settled our country. They will learn of the virtues and misdeeds of our ancestors such as the treatment of the native Americans, and the Negro slaves.

The children will also be helped to understand how the characteristics of the various regions developed. They learn how settlements are related to migrations. They learn about the changes in manufacturing and agriculture. They learn how natural resources have influenced the development of our country.

As the children expand their knowledge to include other regions of the world, they will learn that more and more Americans are living and working all around the world. They discover that people are constantly becoming more dependent upon each other for the necessities of life; that industrialism tends to center population in cities and in certain regions and that within broad but definite limits established by the natural environment there are alternate ways in which every region can be occupied and utilized. They find that no matter how far apart people may live, they are brought closer together by modern methods of rapid communication and transportation. They become familiar with and gain an appreciation of the varied cultures of countries and gradually recognize that the people who make up America have come from these distant lands. They begin to see that out of all the contributions that other lands have made to America, we have developed culture and values of our own, peculiar to our ways of living and to our democratic beliefs. They begin to analyze the day's news in terms of their understanding of world relationships and to recognize the position of the United States in the present-day family of nations. They understand the importance of cooperation to insure the survival and strengthening of democratic ways of living.

Using the past and present as a base, they are able to do a more sophisticated job than younger children of projecting into the future. In thinking about their own future some of these youngsters will begin to develop definite interests and with encouragement will research the possibility of future jobs in these areas.

In projecting the future one interesting and productive activity is to read the predictions of various historical figures in light of the actual outcomes. Another is to try to predict what the role or job of a historical figure might be had he lived in our time.

Level III children continue to develop skills of personal planning and problem solving through the same type of activities available to younger children. They still need time to be alone. They need several alternatives presented for their evaluation in some situations, while in others they can deduce the alternatives for themselves. Teachers still need to give time to individuals to help them with these skills.

Youngsters at this age can do more long term planning than 7- or 8-year-olds. They can make individual contracts with their teacher to perform a particular task within a specified time and then pace themselves so that they can complete the task. As with younger children, these youngsters should be put into situations where they can have the opportunity to develop alternative plans when their initial ones do not work.

Many of the activities involved in developing skill in personal planning are the same as those involved in developing creativity. Both are very necessary now and will become even more necessary in the future. As the rate of change in our society increases, great flexibility and adaptability will be needed for survival.

Goal 3: *Ability to maintain one's mental, physical, and emotional health*

(a) Knowledge of good health habits and the conditions necessary for physical and emotional well-being.
(b) Knowledge of the physical and health problems caused by drug addiction and other personally harmful activities.
(c) Knowledge of sound community health programs.
(d) Understanding body processes and functions.
(e) Development of physical fitness.
(f) Knowledge of safety principles and practices.

Children of 9, 10, and 11 years are cognizant of good health habits such as brushing their teeth, washing their hands after using the toilet and before eating, dressing for the weather, and the like. However, in their exuberance and wish to be with their peers, they forget or are apt to become careless. They often need to be reminded. Providing time in school for washing before lunch, for putting on wraps before going out of doors, and for resting after physical activity helps to overcome carelessness and more firmly entrench these habits.

Children at Level III are aware of their bodies and curious about them. This is the age when factual information is sought in order to substantiate previous learnings. They have learned about the need for a balanced diet, and are now ready to investigate more physiological specifics. Introducing the various bodily functions such as the digestive system, muscles, nervous system, help the children better understand their bodies and the need to care for them.

These discussions lead into discussions of the uses and abuses of the body. Particularly stressed is the use and abuse of drugs. The children learn that drugs prescribed by a doctor for a specific illness are necessary for the well-being of the patient. They also learn the dangers of taking drugs other than when prescribed. They also discuss other personally harmful activities such as the abuse of alcohol, the effects of smoking, dangers of overeating and undereating.

Community health problems are investigated. Such investigations include study of pollution, need for sewage disposal, water systems, and garbage disposal. Pupils become involved in studying inoculations, quarantines, health facilities, and current programs in their immediate community.

Level III children are naturally active. However, the school has a responsibility to provide a sound physical education program for them. They need to be instructed in using their bodies and they need guidance in improving coordination. These children enjoy sports, but need to be shown the how and why of many. They enjoy skiing, skating, tennis, golf, softball, basketball, hockey, and many other individual and team games we usually term children's games. All of these are important to the growing child and all should be included during these years. However, 9-, 10-, and 11-year-olds are still in the formative years physically. Care needs to be taken not to push them beyond their level of development nor allow them to overexert themselves. Because of the physiological development of pre- and post-adolescence, contact sports rules should be modified. They need

time to play and time to rest. They need time to try and to be successful but should not be exposed to exploitation in any game or sport. Their physical activity should be of a wide variety and exploratory. They have many years to achieve.

The children have a wide variety of physical activity

Safety principles and decisions are explained in more detail at this level and children are encouraged to make their own rules. The playground and the school are scrutinized, the need for rules established and then rules are made cooperatively with children and teacher participating. Traffic and highway regulations should be discussed in relation to traveling to and from school. Fire prevention at home, at school and outdoors is a topic included for study by children at this time. These rules pertain to personal as well as group safety.

As at previous levels, the strongest teacher of good mental health in school is the environment established. Children should feel good about coming to school and know that they are accepted as individuals. They have learned the rules of group living and the benefits of these rules. They are maturing and their world is expanding. They are less dependent on adults and therefore will be testing the environment frequently. Teachers of these children are aware of this and provide leeway for exploration. Art forms are encouraged as an expression of one's own feelings, and as a means of interpreting the feelings of others. Incidences of conflict are presented to the children as problems to be resolved. Through the process of facing these problems, suggesting solutions and testing their solutions, the children grow in self-confidence and become more dependent on their own rather than outside resources.

By the end of Level III, the children should know themselves, be aware of their personal strengths and weaknesses, and accept themselves. They should be faithfully practicing many health and safety habits almost instinctively and should be questioning many things in their environment which could be detrimental to their well-being.

Goal 4: *Understanding human relations - respect for and ability to relate to other people in our own and other nations - including those of different sex, origins, and aspirations.*

(a) Respect for and knowledge of other social, cultural, and ethnic groups
(b) Understanding one's relationship to his natural, economic, and social environment
(c) Respect for the community of man
(d) Understanding of home and family relationships and involvement in the home, community and society in general

Many of the same types of activities which are appropriate for the 6- to 8-year-olds are suitable for youngsters in the upper grades. They just become more complex, task oriented, and produce problem solving experiences. These children still need to work on getting along with their families and the children and adults they meet at school and in the community. Activities which can help pupils to learn to regard each person as an individual rather than as a member of a particular group are those which make possible new contacts and longer associations. The list is long and varied and includes such activities as:

- Exchanging written letters or tapes with youngsters from foreign countries who speak English
- Visiting classes in schools with a different racial or ethnic student body
- Participating in an outdoor education experience with children from different racial or ethnic backgrounds
- Having adults and/or exchange teachers from other countries visit the class to tell about their own countries
- Viewing movies, reading stories, and listening to music about children of other lands and cultures
- Participating in case studies and simulations

In all these activities, it is important that youngsters realize that all people are more alike than different and in many cases there are more differences within a racial, religious, national, or even socioeconomic and sexual group than there are across group lines.

Youngsters at this age should be further along toward developing a healthy self-concept than they were at ages 7 and 8. Most of them should be able to discuss their strengths and weaknesses with their peers as well as their teacher and receive and give help from their peers in improving their human relations skills. Some youngsters find keeping a daily log to record their emotions is helpful as a basis for discussing their progress with the teacher and is sometimes a satisfying method for just blowing off steam.

Children at these ages should begin to learn the skills of harmonizing real differences and of disagreeing without being disagreeable. This is not possible without a healthy self-concept.

In addition to discussing simple case studies presented by teachers, some children will be able to write or dictate into the tape recorder their own stories involving a conflict situation which has two "right" sides. Some children who are reluctant to discuss personal conflict situations which they are unable to resolve are eager to receive help when they can present the same situation as a story about someone they know or a fictitious situation.

Youngsters learn to harmonize differences

Goal 5: *Competence in the processes of developing values, particularly the formation of spiritual, ethical, religious and moral values which are essential to individual dignity and a humane civilization.*

(a) Knowledge of the diversity of values

The skills and attitudes to be developed in relation to Goal 4 serve as a foundation for those sought by Goal 5. The study of differing cultures, and the growth of understanding of human relations leads children to see that people have a diversity of values. The social studies program in the later elementary school years introduces people whose daily lives are a reflection of their value system. By making comparisons between the actions of others and themselves, their peers and family, the young learner develops the awareness that people are motivated by what is important to them both personally and socially. It is this commonality of motivation that creates value systems, but since people in different environments (religious background, economic situation, physical setting) experience different motivations, diverse value systems exist. At Level III pupils bring more sophisticated reasoning powers to bear on questions of values and cultural differences.

Level III children learn about people around the world

(b) Skill in making value-based choices

As children grow through their ninth, tenth, and eleventh year, an increasing amount of responsibility is placed on them. Almost without realizing it, pupils resolve more and more moral dilemmas. The school plays an important role in this stage of the learner's development, for it provides opportunity for the children to examine and question their values, and this strengthens them. There are many sources which can provide topics for discussing or role playing value-based decision making. First, of course, are the ideas and questions of the students themselves, who might

be encouraged to suggest problems people their own age encounter through a suggestion box or anonymous letter approach. Often, a popular book, movie, or television program can lead to a discussion of how outcomes might have been changed, given different decisions by those involved. The simulation of real-life experiences, complete with roles of a lawyer, law officer, judge, or civil participants, can help children see that even in the adult world, answers are not easily available, but situations must be dealt with as they occur, using value-based decision making. The role of the law should be explored so children can see how it protects society while still providing for individual ethics.

In these simulations and exercises, emphasis for the learner should be on the process of decision making, and the values upon which a decision is made, not the ultimate decision itself. Forcing pupils to the position that the teacher believes "right" demonstrates that the child's values are not important, and projects conformity and dictatorial methods as appropriate in influencing the values of others.

(c) Commitment to one's own values and acceptance of diversity of values in society

Part of the process of developing values includes accepting the right of others to have different values, while still maintaining one's own standards. Children of 9, 10, and 11 years are still building a sense of the rights of others, and the notion that two different opinions may both be acceptable is difficult for them.

One task of the school is to teach young learners how to accept differing values. Toward this end, simulation, role playing, and discussion sparked by common experiences are helpful. Practice in understanding the ideas of others, and explaining one's own feelings, aids the children in deepening their commitment to their own values. When they see their own well-founded decision being accepted by teachers and other adults with different values children will begin to understand that commitment to values is a goal to be sought.

Goal 6: *Knowledge of the humanities, social sciences, and natural sciences at a level required to participate in an ever more complex world*

(a) Knowledge of basic methods of inquiry in each field

By the end of Level III, pupils have had much training and experience using various methods of inquiry. In the physical sciences they have learned the scientific method and have applied those principles in setting up simple experiments. They have been shown techniques of careful observation, which may have been used to study animals in a natural setting, microscopic life, or the effects of seasonal changes on a field. By using critical thinking skills, hypotheses are formulated, information gathered, and conclusions drawn.

Critical thinking skills are put to much use in relation to social studies and language arts. Pupils are guided to analyze the writings of others, becoming aware of viewpoints, emotional language, slanted judgments and other characteristics of the printed word. In discussions of important issues or the ideas of others, the importance of contrasting opinions, of examining facts and of understanding values should be brought out.

The introductory research and reference skills learned in earlier school years are better developed by the end of Level III. A wide range of resources are known to the learner, including school and community libraries, government agencies, private organizations and individual authorities. The 9-, 10-, and 11-year-old has had the opportunity to use reference materials such as atlases, encyclopedias, and dictionaries in the classroom and school library, to write letters requesting information, and to correlate the resulting information to a question or topic of concern. Inferential skills of "reading between the lines" and being aware of biases help the learner read carefully and make critical judgments.

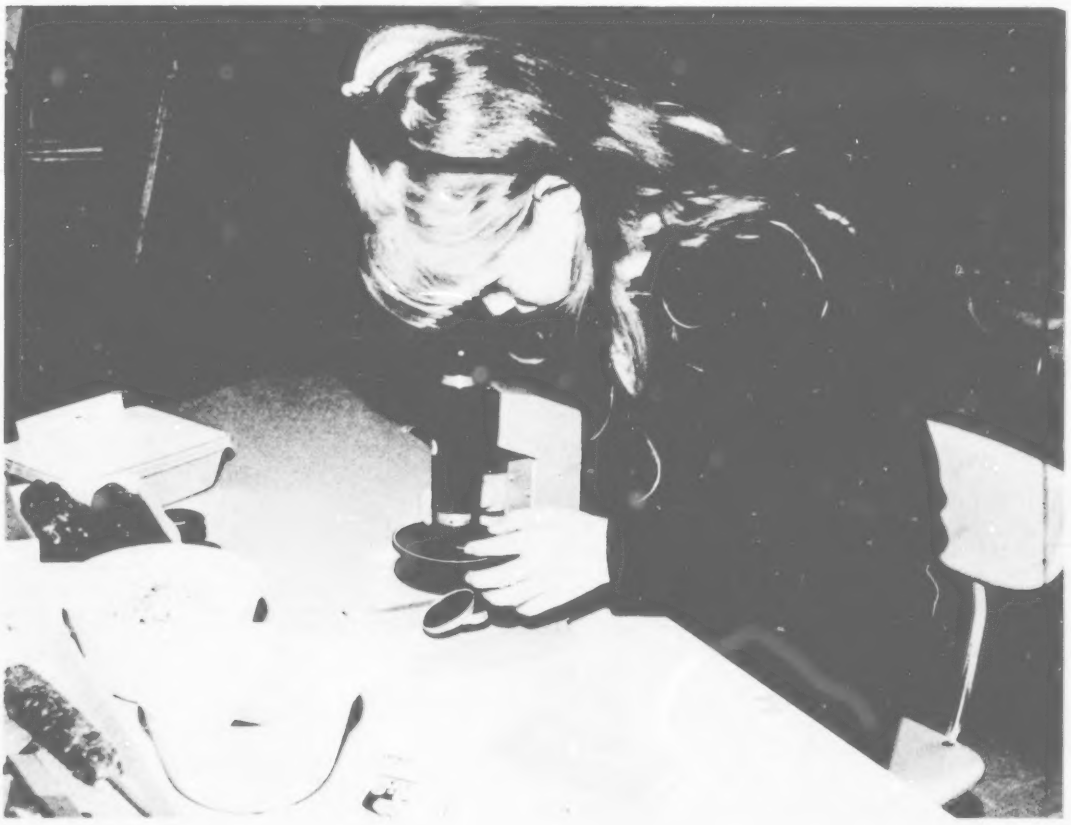
Level III children generally operate on the concrete level. Inquiry skills are limited at this time and will continue to grow slowly with experience. Their ability to develop a high degree of interest and accumulate vast amounts of data on topics of interest to them is a limited capacity with fewer possibilities for transfer into all topics than is often assumed.

Future growth in the basic methods of inquiry will depend on current success with very basic mental manipulations. Inferences may often be drawn from concrete data, for example, while inferences and hypotheses from abstract ideas will not generally be forthcoming at Level III.

(b) Interdisciplinary efforts to focus knowledge on problems

Often as children grow through Level III they express confusion about the importance of subjects taught in school. "Why do I have to learn fractions? I want to be a secretary." "Mechanics don't need to read novels." Such statements as these serve to remind adults that the young learner needs to be taught when and how to apply the skills learned in various fields. A true interdisciplinary approach helps the pupil make daily application of the basic skills.

One important aspect of the interdisciplinary approach is that it encourages the child to separate the concept or basic skill to be learned from the vehicle of the lesson. A story provides insight into human nature in addition to an interesting plot. Mathematical abilities allow one to be a better consumer. Application of a simple scientific principle will repair a bicycle. Through teacher guidance and structured learning situations, the young learner can improve his ability to determine the important facts of a case, seek their causes, and then search for remedies. Practical application of such skills can be provided through class discussion of current events, role play or real-life situations and study of how others dealt with questions requiring an interdisciplinary approach to their resolution. Interdisciplinary studies provide for the development of such cognitive skills as translation, interpretation, analysis, synthesis, and evaluation.



Level III children use a wide variety of resources

Goal 7: *Occupational competence necessary to secure employment commensurate with ability and aspiration and to perform work in a manner that is gratifying to the individual and to those served.*

(a) Developing work skills and habits

Building on concepts introduced at Level II, further development of work skills and habits can perhaps best be developed by having youngsters engage in activities which are meaningful and interesting to them and will demand a degree of responsibility which they can handle. Youngsters of this age can assume responsibility for assisting teachers of lower grade children by helping kindergarten and pre-kindergarten youngsters put on their outer garments in winter, by reading stories to classes, and by being responsible for operating audio-visual equipment. They can and should be more involved by taking responsibility for student government or school newspapers. Each youngster should be given the opportunity to take on some kind of "job" in the school which requires reporting to work on time, to plan and execute the duties of the job so that they do not interfere with other school activities, and provide a real service to the pupils or teachers with whom they are working. Some elementary schools make it possible for every youngster to have a voluntary non-paying "work" experience before they complete sixth grade.

Youngsters assume responsibility for operating audio-visual equipment

In building work skills and habits the children develop a sense of their own strengths and weaknesses. They begin to realize the abilities and the personality traits that make one a pleasant, effective worker. The young learners realize that it is foolish to accept a job that they are incapable of doing; that performing a task one is interested in is easier than working at a boring job. This heightened awareness of one's own aptitudes and preferences helps the youngsters choose work that each has a realistic chance of being successful at. Work habits thus developed include:

- Ability to choose a realistic task
- Skill in managing time
- Knowledge of when to seek help
- Self-control skills of punctuality, neatness, thoroughness
- Interpersonal relationship skills

(b) Developing awareness of work opportunities

Much can be done during the later elementary school years to build awareness of work opportunities. Usually the students themselves can supply a very long list of career choices, some inspired by parents or friends, others by fictional heroes. Research skills can be put to use in seeking information on job qualifications, training, working conditions, and other aspects of particular professions. Through field visits and guests in the classroom, pupils can learn firsthand about the exciting, boring, difficult and easy things experienced by various workers. Although children at this level will make several career "selections" before entering the work force, it is important for them to be aware of the choices open to them.

As at Level II, care must be taken to give pupils a broad view of career choices. As well as avoiding sex/age stereotyping, the teacher should help the learners find out about jobs they are unaware of such as what various factory workers do, how artists and musicians live and, what service careers there are. The children should see how local agriculture and industry not only provide jobs themselves, but create a need for other goods and services: trucks to haul produce, factories to make containers, restaurants to feed the workers. An understanding of the inter-relatedness of economic activities will help the children realize what work opportunities can be provided in a particular area.

(c) Occupation selection
(d) Occupation training and retraining

The next logical step after learning one's own interest and abilities, and becoming aware of work opportunities, is making an occupational selection. While 9-, 10-, and 11-year-olds are not at this stage yet, they can profit from guidance in this area. They can see the need to correlate interest with ability and opportunity to arrive at a satisfactory selection. Often alternative positions in a field are more appropriate. For example, a child might want to be a doctor, but after learning of the years of schooling involved, finds nursing or laboratory positions more suitable. Through role playing or written reports, Level III pupils are able to describe jobs, detail the training needed and comment on the characteristics of a person likely to choose such a position. Such activities allow the learner to explore future possibilities without forcing a premature concern or commitment to occupational selection.

As the children learn about jobs, they should also be guided to create open attitudes toward various positions. Discussions of types of work should bring out that some "status" jobs often carry great work loads and heavy responsibilities, while less prestigious occupations allow the worker more personal leisure for hobbies, recreation, and public service. Occupational training and retraining establish how a person can move "up the ladder" or into a new field as need or interest dictate.

Goal 8: *Knowledge and appreciation of our culture and capacity for creativity, recreation, and self-renewal.*

(a) Knowledge of major art, musical, literary and drama forms
(b) Appreciation of the diversity of mankind's historic and cultural heritage
(c) Appreciation of beauty
(d) Development of individual creative talents
(e) Wise use of leisure time
(f) Promotion of increased use of and appreciation for community resources (museums, historic sites, performing arts groups, etc.) that reflect our cultural heritage and achievements

The kinds of experiences which youngsters 9-11 have to increase their knowledge and appreciation of art, music and literature are similar to those which youngsters on Level II have. However, they will be of a much wider variation to meet individual needs. While the teacher will continue to provide experiences for the entire group, youngsters will be encouraged to go to museums, art galleries, concerts, etc. with parents, older siblings or with small groups. The kind of music they listen to, the kinds of literature they enjoy, etc. will vary from child to child. Many children at this age who will make art or music or writing their life work are advancing very rapidly and are well ahead of the average in knowledge, appreciation, and skill. Additional time and specialized instruction should be provided to meet the needs of these children.

Some Level III children show an aptitude for specific art forms

In terms of the pupils' cultural development, the school has the dual role of both teaching the fundamentals of the various art forms and also fostering their appreciation through exposing the learners to appropriate works. The basics of art, music, and dance are presented and the interrelationship between aspects of cultural heritage, social conditions and the material and content of a work of art discussed. For example,

Tchaikovsky's "1812 Overture," electronic music, "Op Art," and a new classical ballet convey messages about the feelings of the people who create them, in addition to being artistically valuable in-and-of themselves. While tastes differ, all children should have the opportunity to become familiar with such works as opera, chamber music, and modern sculpture. Through an understanding of the efforts required to produce a lasting work of art, an appreciation and valuing of such human contributions can be built.

Hand in hand with making children cognitively aware of various art forms is the task of encouraging young people to develop their own talents and make wise use of leisure time. Teachers can promote this in the classroom by providing worthwhile "free time" activities such as painting, clay sculpting, listening to or practicing music, creative writing, video taping, filmmaking and others. Children with special talents should be encouraged to develop them, but the honest efforts of all need to be recognized in the form of displays, classroom publications, schoolwide fairs, shows, and musical presentations.

A class might make a project of cataloging community resources for the use of teachers, scout groups, and other interested organizations. By making use of these facilities, teachers not only become familiar with these resources but by example show that they value them.

In an era of television, disposable household goods, and instant gratification, children need to be taught that creative use of leisure is satisfying and contributes to the general good. Whether one volunteers at the library, belongs to a garden club or builds sets for a drama group, the rewards to be found in performing such tasks should be within the reach of all.

Level III children become involved in some structured dramatics

Goal 9: *Understanding the processes of effective citizenship in order to participate in and contribute to the government of our society.*

(a) Knowledge about political, economic, and legal systems with an emphasis on democratic institutions and on the global interdependence of these systems.

Children of 9, 10, and 11 years become increasingly more aware of political, economic, and legal systems. They learn about the democratic institutions of our country and are introduced to other systems found throughout the world.

Level III children study the development and evolution of democratic institutions. They become aware of these systems as they exist today and the historical basis for them. They learn about the workings of the government on the local, state, and national level. They become cognizant of the relationship between these and learn how the Constitution sets the rationale for government of our country. Pupils learn about present and past national leaders and their contributions.

After becoming familiar with the economic, political and legal systems of our country, Level III children investigate these systems in other parts of the world. Comparisons are made between different systems and the children learn some of the historical, geographic and social reasons for differences in systems.

By the end of Level III, the children have an understanding of the variety of political, economic and legal systems that exist in today's world and are cognizant of the global interdependence of these systems. They recognize the rationale for different systems and the inability of any one to operate in isolation.

(b) Knowledge of the American political process at national, state and local levels.

Children enter Level III with an intuitive sense of the American political process. They have, to this point, learned about it mostly through experience. At Level III, the children begin to investigate it in more depth. Primaries, politicking and elections are followed closely. The children become aware of the platforms of different candidates, the jobs they are running for, and the right and responsibility of the citizen to choose their leaders.

Current events play a large role in the social studies program of Level III. Through listening to the news on television and radio and through newspaper articles and magazines, the children become aware of current problems and issues. These are discussed and different viewpoints elicited. The children learn how freedom of the press is vital to the American political process and the importance of hearing and discussing various sides of issues. The need for an informed citizenry is emphasized and the importance of each citizen to accept his responsibilities, if the American political process is to be effective, is pointed out.

Level III children study the Constitution and learn about checks and balances. They become cognizant of basic freedoms and their right as citizens. They learn about the court systems and the need for law enforcement agencies. They learn how laws are made locally, at the State level, and at the national level. The children learn about the complexity of the American political process and their responsibility to it.

(c) Knowledge about taxation and fiscal policy

Level III children have had some experience with budgets and taxes. At this level they begin to become aware of the relationship of these to the total American political process. They study the history of government services and taxation. They learn the role that taxation played in our war for independence. They learn how real estate taxes support schools and local government. They learn about income taxes and the services these provide.

(d) Acquisition of citizenship skills:

1. Decision making
2. Group participation
3. Leadership and "followership"

While Level III children study rights and responsibilities, it is through real experience that they acquire citizenship skills. At this level the youngsters assume more and more responsibility for the management of classroom affairs. Each group has a leader and each committee member assumes responsibility. Each child should have many opportunities to serve as a leader of a committee. As the youngsters mature, the committee work involves more substantive than routine matters. These youngsters learn how to be good leaders as well as how to select good leaders and how to be responsible members of committees. The development of these skills is given the same respect as the academic subjects. It is important to allow the pupils to make mistakes and to make as critical evaluation of their progress in these skills as in any other.

Children at this level move out into the entire school for experiences which develop citizenship skills. They learn the rules of parliamentary procedure. They participate in establishing qualifications for officers and representatives, managing meetings and setting up programs for the school as a whole.

Some typical activities for youngsters of this level include:

- Being members of audio-visual squads which operate equipment for teachers and other students.
- Serving as aides to lower grade teachers by helping small youngsters put on outer garments in winter, reading stories to small groups and entire classes, serving as supervisors of small groups of children while the teacher works with another group, taking dictation of original stories from youngsters who are too young to write.
- Planning and participating in school and community activities.
- Working on the school paper or the school "radio" program.

The list of activities in which youngsters in upper elementary grades can participate which will give them the opportunity for meaningful participation as a citizen in their school community is endless.

Toward the end of this age level youngsters can begin to extend the walls of the school into their neighborhoods. Through their schools or class organizations they can give service by organizing campaigns to clean up the neighborhood, visit homes for the aged to give programs, write letters for or read to the residents, and perform other public services.

There is of course a great deal of overlap between citizenship skills and human relation skills. Knowing how to work in a group as a leader and a follower is a vital component of being an effective citizen in our society.

In all these activities, teacher participation in helping youngsters to develop standards and guidelines, and to evaluate performance in terms of these is important.

By the time youngsters complete elementary school they should have experience in discussing problems facing their communities. Considering actual problems such as the need for a traffic light at the corner and how citizens should proceed to get one installed -- perhaps even going through such a process of writing letters and interviewing local officials is vital. In these situations where actual participation is not feasible, role playing, simple case studies, and simulation are more effective than reading and discussion alone.

Goal 10: *Knowledge of the environment and the relationship between one's own acts and the quality of the environment.*

(a) Awareness of one's relationship to the environment

Preadolescence could be described as a time of stretching. The children's bodies are stretching in spurts of growth, their minds are expanding capabilities almost faster than the children realize; emotionally, life is a rubber band, now taut, now relaxed. As all this stretching takes place, the 9-, 10-, and 11-year-old is establishing and confirming a relationship with the environment. The immediate surroundings are familiar, almost forgotten; but every day new adventures take the children farther out into the rest of the world.

Through the more fully developed reasoning powers of Level III children, they are better able to understand how they influence and are affected by the environment. A neglected lawn gets weedy. Tools left at a work site will rust. A combination of increased thinking skill and the adolescent's quest for independence sometimes leads to rash actions with regrettable results. In school the learners are guided to channel their energies and plan for desired outcomes. To increase awareness of one's relationship with the environment, discussion of real life experiences is held. Literature, art, and music inspired by nature are reviewed. Projects are designed for pupils at this level which allow them to explore their world and learn of the place in it, under the unobtrusive supervision of an adult.

Level III children have real-life experience with the environment

(b) Preservation and wise use of resources

As children progress through the later elementary school years, they show a readiness for an increasing amount of responsibility. By accepting and carrying out jobs for neighbors, relatives, and teachers, judgments involving rules, fairness and common sense are needed. These concepts can be well applied to the preservation and wise use of resources.

Laws regarding wildlife are made for the benefit of all. Therefore, hunting and fishing seasons should not be violated. Protected species of plants cannot be picked. Common sense and a respect for the rights of all dictate that one does not litter or mar the environment with graffiti. Through discussion, role playing, and projects, pupils can be led to see that showing respect and proper care for resources is a mature way to make a lasting mark on the world. Conservation Day observances provide opportunity for pupils to do something positive for the environment.

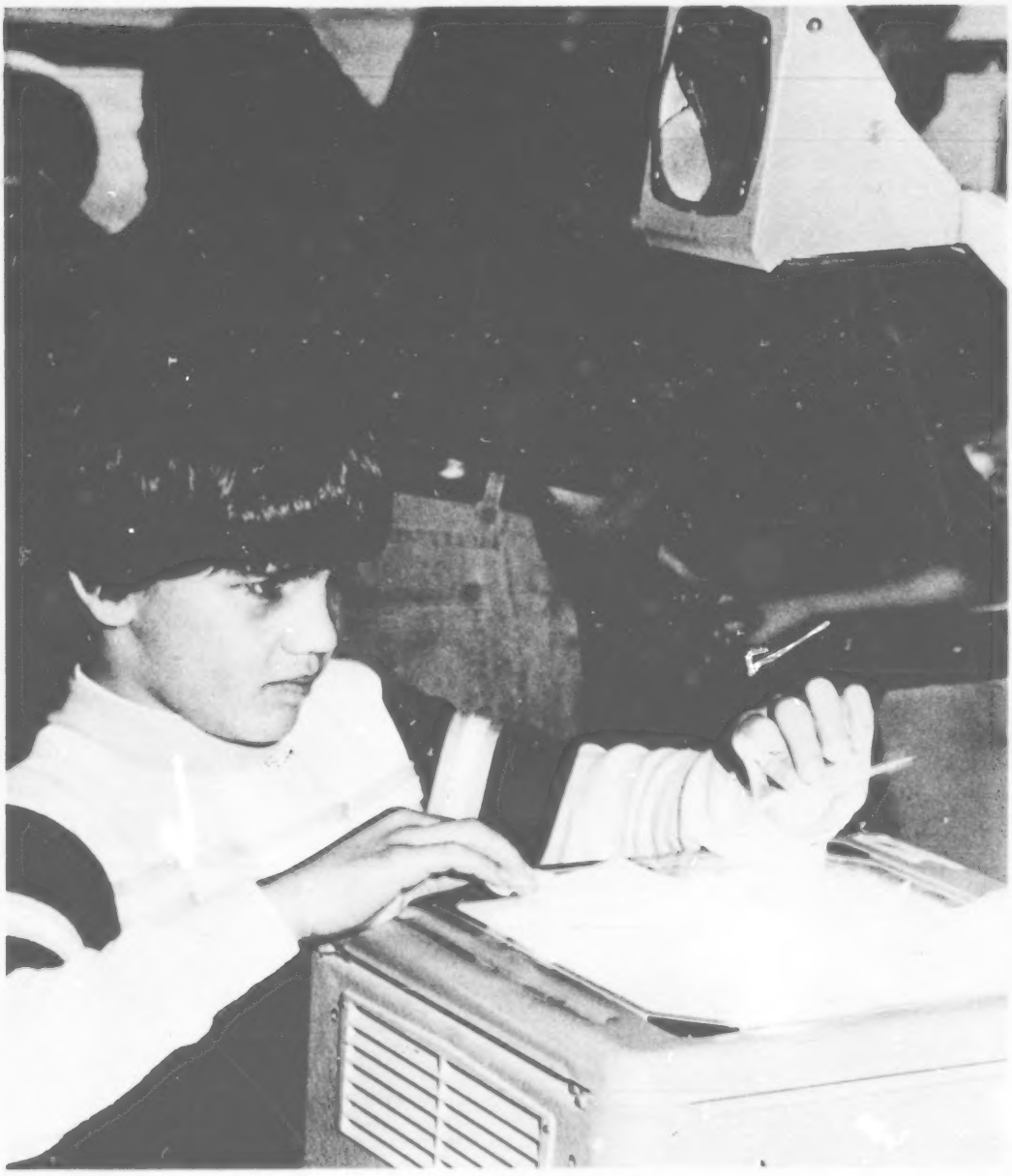
While personal habits promoting conservation learned in earlier years are reinforced and extended, so too are the concepts dealing with society's attitude toward natural resources. During Level III, skills of communication, critical thinking, and active citizenship are brought into play as pupils study local and national policies, and act on their beliefs through letter writing and other campaigns.

(c) Understanding the effects on the environment of man's activities and values - lifestyles, technology, population growth, energy utilization, etc.

Modern science and social studies view environment as an important topic and relate much of humanity's activities to environmental issues. Yet, the teacher must not rely solely on these sources for a complete curriculum for 9-, 10-, and 11-year-olds regarding people's effect on the environment. A single, practical, and necessary supplement to these formal curriculum resources is the sum of the teacher's, the children's and the community's experience with their environment.

For example, many in the classroom may have personally experienced how man's activities have changed the surroundings. Those living near open space may have watched a housing development or manufacturing complex being built. Urban children may have seen houses for a few replaced with a large apartment building. A lake or stream may have to be closed due to pollution, or more happily, opened because of a successful cleanup effort. Pupils at this level are eager to join forces for the improvement of their neighborhoods, or start a campaign to raise funds for an endangered species. This enthusiasm can be built upon by encouraging the children to thoroughly understand how human interaction with nature has upset a mutually beneficial and delicate balance. They should develop values that seek to create harmony, respect, and a sense of stewardship for all living things, so future generations will not have to react to crises, as the present one does.

PUTTING THE PROGRAM INTO EFFECT



Children in the elementary school seek challenges

PUTTING THE PROGRAM INTO EFFECT

In this bulletin emphasis has been placed on a curriculum design in terms of the major goals of education. It is an overview summarizing the program for the elementary school. As such it should not be considered a procedures publication nor a scope and sequence outline. For assistance in planning specific programs, developing appropriate techniques, and designing skill development sequences, refer to individual Department curriculum publications.

In any curriculum document certain aspects of educational philosophy are necessarily included either by implication or direct statement. This is true of "The Elementary School Curriculum: An Overview." However, this chapter has been added to the bulletin to spell out in more detail this reflected philosophy and to offer some concrete suggestions for implementation techniques.

GUIDING CHILDREN IN DEMOCRATIC PROCEDURES

The goals around which this bulletin is designed "assume the fundamental importance of the individual, and a commitment to freedom and to the acceptance of diversity of belief and action within the broad limits of a democratic system." The school is usually the child's first introduction to a large social group, formed for learning and working purposes. The attitudes and skills which the children develop in the classroom will be a part of their life. Learning to work independently, and in small and large groups, are necessary to the child's growth. Through working independently, the children discover their capabilities, learn independence and responsibility, and develop perseverance. Through small group work, the children learn the give and take of working with others, become aware of the advantages of pooling resources, and have the opportunity to exercise both leadership and followership. Being a member of a large group helps the children understand the need for procedures and rules, for listening and speaking thoughtfully and courteously, and for careful use of adamancy and compromise. Through self-expressive activities children exercise imagination and aesthetic organization to know themselves as unique individuals able to relate creatively to the demands of a rapidly changing world. Each of these activities guide the children into becoming autonomous individuals and effective members of the school community and society in which they live.

This section, then, is intended to present suggestions for organizing the classroom in a manner that will promote individual growth and the development of basic skills and skills in human relations and responsible citizenship. It deals with classroom atmosphere, organization, and management; cooperative planning, establishing routines, and grouping; room arrangements, work centers, and utilizing school and community resources.

Classroom Atmosphere

In a classroom in which children feel approval, a sense of belonging, warmth and friendliness, their potentialities are likely to develop well. The teacher sets the tone for this environment. He or she shows respect for each individual child, shows trust for each child, believes in each child, and builds on each child's strengths. The teacher helps each child become aware of her or his uniqueness and special abilities and helps each child to overcome, compensate for, and/or accept particular shortcomings. The child is accepted for her or himself and led to understand and accept herself or himself.

As the teacher shows respect and acceptance for each child, the children are guided to respect and accept others. Diversity of opinion, background, and experience is viewed as a positive force in the classroom. Children are encouraged to find out about each other, to discover how others perceive and react to different things. They are given opportunities to converse, work, and play with others in both formal and informal settings.

The atmosphere of the school and classroom is designed to facilitate children's learnings, to develop their aesthetic awareness, and to encourage creativity. Children are aware that there is work to be done and tasks to be completed. Their imaginations are challenged and a respect for work done with the hands is demonstrated to be as praiseworthy as that of the mind.

They are guided in these responsibilities by an understanding teacher and cooperative peers. They are given and seek challenges, they attempt new processes, and they explore new ideas. They continuously test themselves, discovering their own abilities and capabilities. They strive for success in all they try, but do not fear failure. The support received from peers and teachers enables them to accept mistakes and imperfection as school is a learning place and not everyone can do everything perfectly the first time. This support also enables the children to try again what they could not do before.

ORGANIZATION AND STRUCTURE

An effective elementary school program needs to be carefully organized and highly structured. Each teacher needs to be thoroughly familiar with the aims and objectives of elementary education, the scope and sequence of the various subjects, the recommended curriculum and the children with whom he or she works. Each teacher then needs to participate in long-range planning, setting goals and checkpoints for evaluating the progress in attaining these goals. The teacher also does daily planning, altering activities and processes according to the changing needs of children.

Each day and week is structured by the teacher. This structure provides the direction in which the children will go, the materials available to work with, and the resources needed to reach established goals. The structure provides time lines, expectations, and achievement guidelines. The structure provides the children with a framework within which they may comfortably operate.

Through his or her organization skills, the teacher arranges learnings into a coherent entity. She or he guides the bits and pieces of children's know-how and achievements into knowledge and skills. She or he oversees all that children do and leads them into deeper perceptions and greater competencies. The teacher does this through coordinating activities; providing time, space, and materials; raising questions and providing suggestions; seeing the whole and guiding the children toward it, and providing for each child's method and rate of learning.

By skillful management, the teacher gives each child an opportunity to participate in those activities which are challenging and yet are within limits of the individual's ability. The teacher is alert to see that activities are purposeful and that tasks involve a learning situation which will contribute to the child's growth. She or he is constantly on guard to see that time is not wasted and that each experience is the most efficient way of developing the desired outcomes. The teacher is ever conscious of the fact that effective learning and experiencing only take place when there is a balance of the cognitive and affective domains.

Cooperative Planning

Though the teacher provides the basic structure and organization of learning, she or he involves the children in planning specific activities where appropriate. Cooperative planning for units of work, school and community services, trips, and other aspects of school life provides important learnings for children. It helps them to develop their organizational skills, creative aptitudes, their planning skills, and helps them to establish their goals. Only through actual participation in planning are children able to begin to effectively plan and use their own time, develop effective problem solving techniques, and cope with frustrations and successes of their own making.

Giving children a voice in planning activities also develops a sense of social responsibility, for people are concerned with the success of those activities which they themselves have planned. Because they have a stake in the realizations of group-planned goals, the children are willing to assume responsibility for working toward them.

The extent to which children share in cooperative planning depends upon their previous experience in such planning. Even in kindergarten children can and should begin to plan some of their activities. In the beginning, the teacher guides carefully and sees that choices to be made are as easy as possible. Planning is for only one activity or one time slot at first, and this planning immediately precedes the carrying out of the activity involved. As the children gain experience, more and varied activities and projects are planned with the children taking over a greater share of the responsibility.

The teacher's role in group planning is very important. He or she must provide a great deal of guidance particularly with young or inexperienced children, without dominating the planning period.

Teacher Preparation

The teacher prepares in advance of the classroom situation suggestions that he or she thinks are desirable for the group to consider. Only when the teacher plans effectively in advance do the children enjoy a feeling of purposefulness, of meaning, and of security as they plan with their teachers.

At the time of planning with the children, the teacher shares the plans with them in the same spirit that she or he is asking them to express their own ideas. The teacher has clear ideas of the kinds of activities which are desirable and helpful. He or she must be willing to change preconceived ideas to meet the new ideas children may suggest and to meet the changing needs of the growing minds. The children's contributions during the planning period enable the teacher to determine these needs. By participating as a mature member of the group, the teacher takes an active part in planning.

In the planning process, the teacher must consider the need for fundamental skills, as well as for good social relationships. In addition, the teacher must be aware of the needed instructional materials such as books, maps, audio-visual aids, community resources, various art media and equipment for construction and experimentation. The teacher must be able either to provide these materials or at least to know whether and how they can be made available to the children.

As children and teachers engage in the process of cooperative planning, the children learn how to make choices and judgments, assume responsibility, evaluate their experiences and respect the other person's point of view. They learn to use their past experiences to help them solve new situations.

Grouping

In order to most effectively use children's and teacher's time, it is often necessary to have children work in small groups. One reason for grouping children within a class is to insure that each child will be placed where he or she can work with a few other children who need to learn the same skill and content that he or she also needs to learn at a particular time. Other important reasons are to provide groups of children an opportunity to practice special skills, to work in art activities with children at the same level of creative development, to carry on research for some phase of their work, to help each other, to discuss learnings and progress, or to engage in creative activities.

Small groups are not static. A child may work with one group today on word attack skills and another group tomorrow on comprehension skills. The child may work with one group when involved in skill development and another group when involved in creative activities. The groups are formed to meet a need and abolished when that need has been fulfilled.

The kinds of grouping used in a classroom at any particular time depends upon the purposes involved in the situation. Several kinds, used in many schools, are illustrated on page 95.

Scheduling

If each elementary school subject could be classified and compartmentalized into its own tight little section, scheduling would be a lot simpler. However, teaching, learning, expression, and creativity do not work that way for young children. Most of the activities in which elementary children are involved cross subject lines. When involved in a social studies project for example, the children are utilizing and extending communication skills, fine and graphic art expressions, study skills, and problem solving processes.

Because the learning of young children is an integrated process, the time spent on any subject of the curriculum varies from day to day and week to week. One day the children may spend a great deal of time working on a science investigation, another day a major portion of day may be devoted to directed activities aimed at skill development.

At the same time, it is important that there be continuity in the program. Activities that children are involved in each day should be related to past and future experiences. As new skills are introduced, the teacher needs to assure that children have opportunities to practice them. When projects are started, time needs to be regularly allotted to assure children are able to bring these to conclusion.

There also needs to be balance in the elementary school program. Teachers and supervisors should check by weeks and months the time children are spending on the various areas so that any tendency to neglect subjects will become apparent. This means constant evaluation by every means possible -- careful testing, checking, replanning, experimenting, diagnosing, and changing. It means, too, keeping in mind that the elementary school is mandated to teach the common branches and certain specified subjects such as the humane treatment of animals, fire prevention, the flag, etc. so that they will not be neglected.

Time schedules should be flexible and easy to change. The schedule should be a guide rather than a restriction. The time for various subjects should be apportioned on a weekly or even monthly basis rather than by the day. Many supervisors have found that a block program is better than an exact time schedule. For example, if subjects like social studies and science are grouped into the same part of the day's plan, with a large block of time provided for the children's activities connected with these areas, it is easier for the teacher to work from group to group according to the daily needs of each. Caution must be used in assuring that time for the practice and mastery of basic skills is also provided.

Modern knowledge of child development opposes too rigid time scheduling. Less mature children need their teacher and depend upon her or him primarily for what they learn while older boys and girls in the same group may already be learning easily from books as well as from self-directed activities which require less supervision by the teacher. The time required for teaching the skill subjects is determined not so much by content as by pupil maturity and techniques employed by the teachers.

The materials of instruction play a vital part in the schedule, too. The fortunate teacher, provided with plenty of good materials geared to the pupils' abilities, can expect the work to be finished more effectively and in less time. Wading through difficult textbooks or reciting for forty minutes a day may meet the time requirements in social studies, but the dividends in pupil understanding will be greater if the teacher uses field trips and has the latest references and maps, pamphlets, films, recordings, pictures, and materials for the development of creative activities in writing, oral expression, dramatics, art and music.

Certain time requirements in New York State are fixed by law for such subjects as physical education, safety, fire prevention, etc. These requirements should be familiar to the teacher and supervisor. There are other subjects which are emphasized by local custom, by the philosophy of the school and by the objectives which local school authorities deem important. Within this framework, time scheduling is a local matter and the responsibility of the local school administration. It can not be prescribed by the State because no uniform prescription can meet the diverse conditions.

It is possible, however, to arrive at approximate time allotment which will help to apportion the school program equitably. In accordance with modern ideas of the place and importance of the various subjects which are part of the elementary school program, and keeping the principle of flexibility in mind, the suggested schedules herein may assist supervisors and teachers in their planning:

Primary Grades - Weekly Percentages

English Language Arts	35%
Social Studies	10%
Science	5%
Health and Safety	5%
Mathematics	10%
Arts and Crafts	10%
Music	10%
Physical activities including physical education, trips, games, etc.	15%

Intermediate Grades - Weekly Percentage

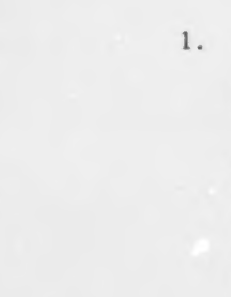
English Language Arts	30%
Social Studies	20%
Science	10%
Health and Safety	5%
Mathematics	15%
Arts and Crafts	5%
Music	5%
Physical activities including physical education, trips, games, etc.	10%

In administering such a schedule, it is good procedure to arrange a time for "noisy" activities like hammering and sawing just before an intermission; to plan for quiet activities following a period of active play or physical exercise; to use time for activities requiring writing, drawing, and music after periods of quiet relaxation. It is important, too, to include time for such activities as cooperative planning, making choices, and evaluating by the children; to provide a balance between active and quiet occupations, and among verbal, manipulative, and physical activities. Children also need to have opportunity during the week to work alone or in small groups part of the time.

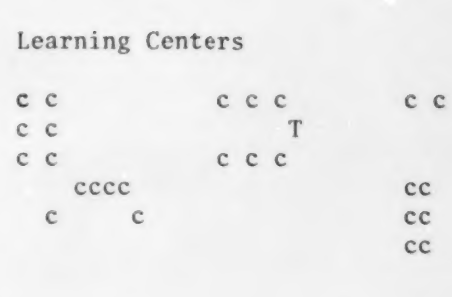
The value of any time schedule lies in wisely directing learning activities so that all types of experience may help to bring about the all-around development of children. A well-balanced program gives opportunity for putting healthful living into practice. Such a program is free from strain and hurry. It provides for the social and emotional as well as the mental and physical growth of the child. Time is important, indeed, but as the teacher grows in skill in teaching and in knowledge and understanding of children, the time schedule falls into its proper place and the clock on the wall is a less authoritative influence upon the pattern of the busy day.

Organizations for Teaching and Learning

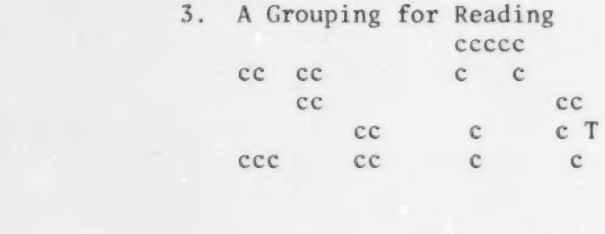
1. The Class as a Whole



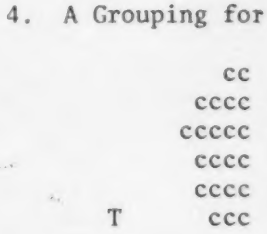
2. Learning Centers



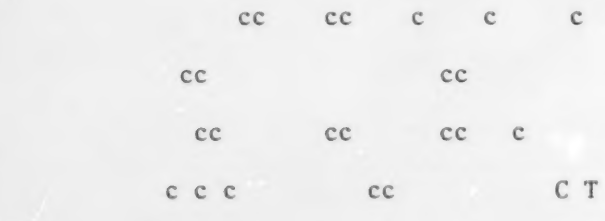
3. A Grouping for Reading



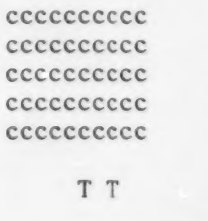
4. A Grouping for Reporting



5. Individual & Pairing



6. Teaming with Another Class



The teacher's role changes to meet the needs of the children.
The teacher's part in each organization shown above is:

1. Teacher develops a lesson
2. Teacher moves about providing guidance at each center
3. Teacher works with one group at a time; others work independently
4. Teacher plays role of listener as reports are given
5. Teacher provides individual attention
6. Teachers watch film, listen to presenter, or present to large group

Managing Several Groups

Having a large number of children involved in a variety of activities at one time calls for organization, rules, and understanding. When children have had experience in working in small groups and independently, they can operate, after they have planned with their teacher and classmates, for periods of time without direct adult supervision. In the beginning, however, they need much guidance. A good rule for classes inexperienced in group work is "go slowly." Confusion, noise, and often failure result from moving too quickly.

In the beginning, it is best if each child and each group has a task, understands that task, and has a time frame in which to complete it. As an example, the larger group may be formed into groups to explore areas of a social studies unit.

The teachers plan may be:

First Day - Introduce study of employment in local community. Show pictures of different people at work. Initiate discussion on types of work done in community. List on the chalkboard all jobs mentioned. Categorize these according to services, industries, businesses, etc.

Second Day - Review lists of jobs with children. Group children according to expressed interest in a particular category. Ask each group to:

a. Choose a chairperson - 1 minute
b. Choose a recorder - 1 minute
c. List all the jobs they can think of that would fit in their category - 5 minutes
d. Have each group report to the larger group. Discuss

Third Day - Have children organize themselves into their interest groups. Each group will:

a. List questions they would like to find answers to about the jobs they've listed - 15 minutes
b. Discuss ways of obtaining answers to their questions - 5 minutes
c. Make a list of needed resources - 5 minutes

Fourth Day - Children will organize into groups and begin to find answers to their questions by:

a. Reading materials supplied by the teacher
b. Writing letters soliciting information
c. Helping each other with reading and writing tasks
d. Discussing ways information may be shared with classmates

Fifth Day - Children will organize into their small groups to continue independent and group work

Sixth Day - Discuss with the children some ways each small group might present its findings to the total group. Suggestions might include writing stories, presenting skits, making a bulletin board, etc. Have children form their small groups to:

a. Decide on their projects
b. Begin to work on their presentations

At this point, the children should be able to work independently. There will be free conversation, exchange of ideas, quiet movement, and an informal atmosphere. The teacher moves from one group of children to another, providing assistance, raising questions, and giving suggestions.

Another type of grouping involves children working on different areas of the curriculum at the same time. This method of grouping involves different kinds of groups operating simultaneously. With this system it is better to start with only one group while the rest of the children go on with individual assignments at their desks while the teacher gives the first group the kind of careful direction it needs at the beginning. As this group gets underway, attention can be given to developing independence in the rest of the class which is now, temporarily, a second group. As both these groups learn to work independently, need for further differentiation will usually arise, and more groups may be formed.

If, at some time, the process breaks down, noise and confusion reign, then the wise teacher stops all activity, brings the children back into a total group situation and discusses what has happened with the children participating. The session is aborted for the day, but it should be tried again the next day. It takes time for effective group working relationships to develop.

There is no blueprint for grouping which can be applied to every situation, and no prescribed number of groups which should be organized. The following general procedures, however, contribute to effective group operations:

1. Know as much as possible about each child before you start grouping. Study all available records of achievement and the child's talents and abilities that will function best in different types of group projects. Discover specific problems by personal observation and by various types of testing. Study health records, capacity to achieve and general personal and social development.

2. Prepare materials, chalk board study direction, and teach some specific techniques for independent work in advance of introducing group work. This will allow the children to carry on with a minimum of help.

3. Some children may need individual instruction. Other children who have reached the same stage of progress in a skill may be grouped

together for practice, These groups are flexible, and as the children overcome their individual difficulties, they form regroupings for other purposes.

4. Not every child needs to be in a group for special practice on skills. A child who has reached a satisfactory degree of proficiency may have the satisfaction of applying these abilities to her or his own purposes.

5. It is helpful for teacher and children to agree upon rules that should govern the groups, before the groups start working. These may be very simply stated at first -- perhaps in the children's own words. Some of these beginning standards might be:

   Know what work our group is to do today
   Work quietly
   Complete the job
   Go from one job to another
   Find and correct our own mistakes

6. It is sometimes desirable to allow children to form groups on the basis of personal friendships and mutual interests. This procedure will give the teacher opportunity to observe group behavior.

7. Not every group needs to be carrying on the same type of activity at the same time. One group may be practicing a skill or studying a list of words. Another group may be painting or weaving. Another may be looking up reference materials. Another group may be holding a committee meeting. Still another may be preparing a joint outline. Some children may gather in the classroom library to read. One group may be rehearsing a dramatization or practicing the steps of a folk dance. Other children, either in groups or individually, may be arranging exhibits for reports to be made later to the entire class. While all the children are thus busy at tasks each group has assumed, they are unified by a common interest in the unit of work out of which all of these varied activities have flowed.

8. Learn to analyze the work and study habits of each child and to help each child improve his skills as needed, whether it be in computation, the arrangement of a poster or bulletin board, reading habits, or use of tools and materials.

9. Sometimes the teacher needs to work throughout the entire period as a member of one group, guiding and giving help and individual instruction. While the teacher is thus occupied, the children in the other groups carry on their own activities until such time as the teacher can come to work with them. During this time there might also be several children working in pairs or working individually at their desks, depending upon their needs at the moment.

10. Usually it is desirable for a child to work with the children he prefers. Sometimes, however, the teacher may find it necessary to make suggestions about the composition of a group so that it may be

properly balanced. Children with special talents may be needed in a particular group. Children with personality difficulties should be placed with those who can help them. Shy, insecure children should be allowed to choose those with whom they can relax and be at ease.

11. For every type of group work, except that for the purpose of training in specific skills and knowledges, each group should have its share of children with well-developed abilities as well as those who are developing more slowly. Children not gifted in social relationships may gain approval by some unusual skill. The more articulate children will learn to be patient and understanding of others. Every child can in this way have opportunities to appreciate the contributions of other children with abilities different from his own.

12. Children who can work well with almost any individual or group, may occasionally be asked by the teacher to work with some particular group for the help they can be to that group. However, their own preferences should not be disregarded too often.

When children understand group work and have been given careful guidance, they learn to plan their work and carry it forward by themselves under the guidance of their teacher. The learnings that result as children work with others in this manner are most valuable.

Establishing Routines

The activities and routines necessary in group living are in themselves learning opportunities. Time should be provided early in the school year, and at other times when needed, for all pupils to participate in planning and establishing such routines as:

Care of the room
Pupil traffic
Caring for wraps
Care of plants and classroom pets
Preparation, use, distribution, care, and storage of equipment and supplies
Keeping class records
Effective use of the bulletin board
Collecting money for milk, lunch, and the like
Sharing information and materials
Changing from one activity to another

In performing these necessary tasks, children are given an opportunity to assume responsibilities and to recognize that their classmates are depending upon them. Of course the degree of responsibility which the child can successfully assume depends upon his age, his grade and the previous experiences he has been afforded. While school routines are new for all young children entering school for the first time, older children, too, may never have been given the opportunity to be responsible. When organizing routines, the teacher begins at the stage the children have

reached and goes on from there. Sometimes it will be necessary for an upper grade teacher to help some children learn very simple routines.

The development of a sense of responsibility does not come about in one lesson, or in one year. It is a continuous process as children are encouraged to take over more and more of the management of their classrooms.

Helpful Room Arrangements

The classroom is more than just a place where children meet "to do lessons." It is a planned setting designed to promote work and study. Carefully arranged furniture and materials, cleanliness and order make the room an attractive place in which to live, and a place conducive to the challenge of learning.

Teachers and children will plan together the best ways of utilizing their available space, for using and storing the materials that are provided, and for the room's decorations.

Each child should have a place for personal belongings. There should be enough room so that while some children are moving about on accepted tasks, others have opportunity for quiet work at tables and desks.

Space needed for storing materials is limited in many classrooms. The teacher and children decide which materials are most often used and those that may be placed in reserve. The materials the children use frequently are placed where children can get them easily.

Each room needs something to attract the eye. This may be a display of the children's work, an attractive bulletin board, a vase of flowers or a plant in bloom. The children will feel that the room is their own if they share in making it as attractive and workmanlike as possible. Order and neatness in arrangement, and proper storage and care of equipment, supplies, and belongings are goals to be consciously sought.

In each room there should be something for the children to do as soon as they enter the room. The room itself should invite activity. There may be books to read, reference materials to look up, bulletin boards to bring up to date. experiments to check, flowers to arrange, plants to water, pets to feed, or puzzles to be completed.

Work Centers

In order to create an orderly classroom that provides for individual and group work, it is usually desirable to designate areas for the various activities. Such areas help to mark off and limit in a clear way the amount of floor space available for an activity. The arrangement of the furniture, equipment, and supplies may indicate the space for a particular type of work. The children soon know that the library center is a quiet place, and that blocks remain in the block-building center.

Sections are thus set aside so that children can work together in small groups in a setting of organized materials which help to stimulate their

learning. In these centers the children may paint, read, write, print a newspaper, sew, or construct the illustrative material they need to clarify their ideas about what they are learning. The centers provide children with opportunities to create, to achieve success in group work, and to study independently.

The teacher and children plan together how they will manage their work centers. As their work changes, new centers are added and other centers are discontinued. The materials in the work centers keep pace with these changes and with the growth in the children's needs and interests.

A stimulating and challenging environment will include as many centers of activity as seem feasible for the particular group. One factor which will influence the number and kinds of work centers will be the children's previous experiences in self direction and in group living.

In most rooms there will be at least a science center, a reading or library corner, a space set aside and equipped as a construction center, a music area, and an art corner. The following points should be kept in mind when organizing work centers:

1. Plans for establishing and using a work center should be developed cooperatively by teachers and pupils.

2. One center at a time should be planned and organized. Its care and use should be routinized before others are added.

3. Materials and equipment should be labeled, well organized and easily accessible. They should be properly stored after using.

4. A committee of children should assume responsibility for maintaining each work center.

5. Centers should be colorful and neat, and the room should reflect the immediate activities of the children and present a coordinated, artistic effect.

In kindergarten through grade 2, the program for these years and the interests and needs of the children would indicate that such work centers as the following may be organized:

Block building
Housekeeping
Art
Picture book center
Construction
Mathematics
Music
Science and nature

In grades 3 through 6, the following work centers may be organized as they are needed:

Art
Crafts and construction
Current events
Library
Science and nature
Physical education
Hobbies
Mathematics
Music
Publishing

Materials and equipment for work centers would include:

The Library Center

Book reviews written by children
Book shelving
Books (including dictionaries, encyclopedias, pamphlets, materials for research, books on varying reading levels, periodicals, brochures related to topics of interest)
Books opened to interesting pages
Bulletin board
Card file of library materials
Displays of book jackets
Magazine racks or bins
Magazines
Picture files
Pictures organized according to a plan, useful to the particular grade and class
Reading table and chairs
Audio-visual equipment: filmstrips, loops, language masters, etc.

The Arts Center

Assorted papers and fabrics
Clay
Crayons
Easels or board space to hang paper
Large bristle brushes
Large sheets of drawing paper (preferably rough surface)
Paints in small jars or containers
Smocks or aprons
Copper wire and sheets
Corrugated paper and cardboard boxes
Jars or boxes of nails, screws, wires, tacks, etc.
Leather and felt
Rulers, compasses, whittling knives
Scissors stored in holders or boxes
Sewing and knitting equipment
Table with vise, or workbench
Tool board equipped with hammers, saws, chisels, screwdrivers, etc.
Wool and string
Wood, bar soap, pipe cleaners

The Science Center

Aquarium
Charts of questions and problems for investigation or experimentation
Flashlights, dry cells, wire, bell
Growing plants and flowers, seeds and bulbs
Magnets, lenses, mirrors, tuning fork
Maps, globes, graphs
Shelf or table for collections, specimens, or models
Terranium, aquarium, plastic containers, scales, measuring instrument

The Publishing Center

Books concerned with printing and writing style
Paper
Pencils
Pens
Picture files
Story suggestions
Samples of types of publications
Typewriter

The Listening Center

Tapes
Records
Radio
Stereo record player with earphone jack
Stereo tape recorder with earphone jack

The Music Center

Classroom instruments
Musical instruments
Music books
Stereo record player with earphone jack and loudspeaker
Radio
Stories of musicians, musical selections, and instruments
Records
Stereo tape recorder with earphone jack and loudspeaker
Tapes

Mathematics

Measuring devices (rulers, volume measures)
Solid geometric shapes
Napier rods
Graph paper
Geoboard
Balance scale
Counting frame
Commercial games
Standard weights
Tangrams

A good room environment, cooperatively planned, provides children with opportunities to create and to achieve success in independent and group work, while they gain understandings, knowledges, skills and effective ways of working democratically. In such an atmosphere of controlled freedom, children learn to share and to cooperate wholeheartedly in group endeavor.

The Large Group

There are times when a large number of children will function as a single group. Some of the activities in which a large group of children might be engaged are:

1. Planning the daily or weekly program
2. Gaining orientation for a new unit of work
3. Holding a meeting, forum or round-table discussion to talk over a problem that concerns many children
4. Introduction of a new drill or technique
5. Listening to stories, television program, watching a film, listening to music, watching a dramatization
6. Folk dancing, choral singing, or speaking
7. Games and other physical activities
8. Evaluating the group's progress and growth

It is important to arrange some time during the day when the children can operate as a large group. Children need some experience which they can share in common and on which new learnings can be planned. They need the opportunity to be part of a large group because these experiences reinforce children's feelings of belonging. Learning to function in a large group, to express oneself before one's peers, and to present to a large audience are invaluable skills for each child to possess.

Discussion Techniques

Free and open discussion is the essence of democracy. When problems are solved in the classroom through guided, purposeful discussion, the teacher is helping the children to set a pattern for solving future problems. Group discussion provides an opportunity for children to learn to think together and cooperatively solve their problems.

Discussion is a major part of the planning period in the modern elementary school. It occurs in the science and social studies periods and in all other phases of the children's work. It may precede and follow a trip, a movie, a party, a play, or an assembly program. It is stimulated by problems growing out of units of work. It may arise out of problems which center in the children's efforts to manage their affairs, or it may center in their work and play relationships.

Discussion gives children an opportunity to express many different points of view and to defend their own opinions. The children learn to appreciate and to understand the opinions and feelings of one another. Respect and consideration for differences are developed. The children learn to suspend judgment on issues until all the facts are weighed.

A newly organized group must establish some workable rules for carrying on discussion. Procedural matters might well be the very first topic discussed in a planning period. In discussing and deciding on these rules, the children have an opportunity to make a common decision concerning their own group, thus acquiring some needed experience in group thinking. These rules should be very simple. At the beginning, no more may be needed than that the children discuss and agree that only one person should speak at a time, when she or he is recognized by the leader.

As leadership emerges, it should be utilized. The teacher may serve as discussion leader at first; but as the children develop skill in leadership, they should take over. The leader at all times defends the right of group members to express themselves, yet must prevent a few from monopolizing

the discussion. The leader's responsibility entails clarifying the statement of the problem so that the group members understand it. Until the children are experienced in participating in group discussion, however, the teacher must help in clarifying the problem. As the children become more experienced, the teacher should have less to do with wording and rewording the problem. But this takes time. Stating a problem clearly is not an easy skill to acquire.

The leader is also responsible for helping the group to "keep to the point." Without help, the children easily wander from topic to topic, whether relevant or not. In keeping the group "to the point," the leader must be tactful so that children do not lose their desire to contribute in whatever way they are able. Children must feel that their contributions will receive serious consideration.

As children become skillful in participating in group discussion, they also develop skill in finding and using the information needed for solving group problems. The group learns to use sources of information critically and selectively.

In order that the teacher may know whether the group is improving in its ability to carry on group discussion, the following criteria may prove helpful:

- Problems are stated clearly
- There is participation by many children
- The contributions are relevant to the point being discussed
- There is no attempt to "win" an argument; rather there is searching for a solution
- Extraneous problems are sifted out and put aside for another time
- Accurate information is obtained and used when needed
- Many different sources of information are used: printed material, people, trips, pictures
- The contributions are factual, and unbiased
- The goal is always kept clearly in mind
- Action is planned
- Evaluation follows all discussion

Learning to share successfully in group discussion is a flow process. It takes much more time for ideas and experiences to evolve from group thinking than it does to present them in lecture form, or merely to tell the children what they are to do. It is, however, a good method for sharing information related to experiences, for developing interest in important and timely subjects, for increasing skill in evaluation, for developing appreciation of differences in points of view, for sharpening the children's powers to think clearly, and for solving problems of group living in the class. Group discussion helps to develop skill in a process that is basic to our democratic culture.

Learning to Harmonize Opposing Points of View

Leading children to understand the differences of feeling and ideas that grow out of group discussion requires skill and insight on the part of teachers. Some teachers think of the democratic process only in terms

of parliamentary procedures, and, far too early in the child's development, begin to teach them. Although some of the simpler parliamentary practices do have an appropriate place in the elementary school in connection with school clubs as early as grade 4, of greater importance in the elementary program is the need to teach children useful techniques in dealing with conflicting ideas and opinions. Reasoned conflicts can usually be harmonized when it is recognized that they almost always grow out of:

- Misunderstanding: Each member of a group should make every effort to understand the meaning and intent of all other members. The remedy is to define terms.
- Different facts: Opinions may vary because they are based on different sets of facts. Draw out and pool the facts.
- Questionable facts: Many conflicts are due to this. Reserve judgment until true facts can be presented. Start the children finding them.
- Different values: Shift discussion to a discussion of values. If the values are so deeply rooted in the individual that new facts and the use of reason have no effect on the persons in conflict, "agree to disagree."
- Different interpretation: When all have the same facts, but interpret them differently the members of the group must be willing to try out the different possibilities until they see which is the best interpretation in that situation.

Children and Research

Research is not an activity limited to adults. When children undertake to find information toward the solution of a problem, they are engaging in research. The kinds of research in which elementary school children participate include research through reading, trips, interviews, experimentation, and the use of audio-visual aids.

The school provides opportunities for children to learn to use these sources of information effectively. They learn which materials are available in the school library, school exhibits, and school collections. They learn to use maps, charts, and scales. Their skills in reading and mathematics are employed to gather, report and analyze data. They investigate musuems, zoos, stores, and parks in the community. They learn that many facts can be found in encyclopedias, dictionaries, and other reference books. They find out that they can learn much by talking and listening to other people. They learn to find explanations of familiar phenomena by engaging in simple experiments, taking trips, and engaging in other activities which are primary sources in research.

The teacher guides the children to find new sources of information and helps them to organize the information they find. She or he shows the children how to break down complex problems into simpler parts which they can handle. The teacher helps them have a clear understanding of what they need to find out, so that each child can state the problem in simple terms

of "What I want to know."

A research program in the elementary school is meaningful when:

- The problem undertaken is actually the children's immediate problem, not an adult's or an assigned problem.
- There is real desire on the part of children to find out.
- Materials adequate in amount, kind and appropriateness are provided.
- Planning precedes the research activities so that the children are clear as to what they are looking for.
- Instruction is provided in the needed research skills.

Research activities emphasize planning together, obtaining information together, and sharing the outcomes. Children gain knowledge from people and places as well as from books. Research is not an activity to be carried on for its own sake, but is a means to the end. The satisfactory solution of present problems helps the pupil to solve future problems more effectively.

Evaluation

Evaluation is a continuous, day by day process of determining progress and growth. It is a means for guiding growth, not an end product. Evaluation in the school is applied not only to skills and knowledge, but also to children's growth in mental and physical health, social relationships, critical thinking, appreciation, creative expressions, and interests and attitudes.

There are two equally important purposes in educational evaluation. One is to provide information for teachers, supervisors, administrators, and parents. The information gained is used for the improvement of the total educational program. The other is to help children learn. Evaluation in which children share stimulates critical thinking and self-direction on their part.

A good evaluation program is based on worthwhile goals. Evaluation measures the growth and progress of children toward those objectives in the curriculum which teachers and supervisors and parents think of most importance. This involves a clarification of what children, teachers and parents are trying to do. Clarifying purposes is more difficult than obtaining and interpreting evidence.

A good evaluation program involves both formal and informal methods. Each of these techniques is used where it best fits the need of a particular situation. Each has its merits. What the teacher wants to appraise will influence the techniques used.

By using formal, standarized achievement tests the teacher is able to compare children's achievements with the norms for the State or country. Standarized tests are also valuable for periodic check-ups, probably once a term or year. It should be recognized that in an average class one-half of the pupils will be above the norm of their age and grade; one-half will fall below the norm.

Informal methods of evaluation include observations, teacher-made tests, discussions with individual children, and reviewing children's work. Keeping folders of children's papers is beneficial in determining individual strengths,weaknesses, and areas of growth and accomplishment. These folders also help in diagnosing areas in need of attention.

Observing the way in which children handle problems, work and play together and express themselves provide evidence of their growth. Dramatic play, use of film and video, approaches to exploring space through creative dance, picture making, and musical interpretation provide insight into the children's creative and mental growth.

Teacher-made tests are an informal method of evaluation. These tests can be as long or as short as desired and used more frequently than formal ones. Informal tests are useful in locating strengths and weaknesses in the teaching and learning of specific units of work.

The teacher wants to know as accurately as possible how well the children are growing. In order to do this, the teacher needs a working knowledge of the kinds of techniques and tests available. Principals and supervisors can help teachers by providing books and articles pertaining to evaluation techniques, a file of selected standarized tests, and equipment needed for constructing tests.

Children evaluate themselves continuously with or without the guidance of the teacher. But they need help in judging themselves and their experiences accurately and fairly. Children tend to be very critical of themselves. Sometimes they become discouraged because they can not reach the unrealistic standards they impose upon themselves. Sometimes children's emotional problems, feelings of insecurity and inadequacy, interfere with a fair self-evaluation. By speaking with such children privately, the teacher learns what's wrong and can advise and guide them.

As children are given opportunities to participate in evaluation experiences, they learn to analyze their skills, attitudes and behavior with respect to the competencies required. They get help in clarifying their goals and have a sense of achievement as they consider progress and means of improvement. "Let's talk about our trip yesterday, and see what we accomplished; then let's see what we can do to improve the next trip," may start off a discussion, as the teacher helps the children to assume responsibility for their work.

Children use various techniques to help in self-evaluation. They may keep diaries of their activities, make folders in which to keep their work, list their special interests, compare recent achievement (objects made, pictures painted, papers written, test scores) with records of earlier achievement. They may keep graphs or rate themselves on check lists. Personal conferences with the teacher are an excellent means of guiding children in self-evaluation. Such conferences may be held while other children are engaging in independent work.

Much of the evaluation done by children is cooperative in nature. Children may set up immediate and long-range goals and evaluate their progress in terms of these goals. These evaluations may be held during the planning

periods or during the end-of-day period when accomplishments are summarized or whenever the need arises. Groups may evaluate by having a general discussion; by analyzing the specific work accomplished; by using a check list, inventory, or rating scale; and by studying the results of tests and measurements of achievement and growth.

Characteristics of a Good Evaluation Program

- A good evaluation program is continuous. Since evaluation is concerned with more than end products, it must be a continuing process throughout the child's school life.
- It is cooperative. Evaluation should not be done by the teacher alone, but by children, parents, teachers, and supervisors working together.
- It is functional. The process of evaluation and the results revealed by evaluation should produce growth.
- It uses varied techniques. No one pattern or technique for evaluating should be used to the exclusion of others.
- It is consistent with the educational objectives agreed upon.
- It has application and can be transferred.

Evaluation helps teachers know children better. It helps teachers provide better instruction so that each child can attain maximum growth and development.

Parent-School Relationships

Parents and teachers are partners in helping children grow. To achieve the goal of all-around development of each child, home and school must work together. Happenings at home, whether good or bad, affect the child's behavior in school. The child's interests, attitudes, and behavior are the results of his experiences past and present, in the home and community as well as in school. The school can not adapt its curriculum to fit the individual needs of each child without knowing the influence the home life is exerting on each child.

Schools are aware of the need for reporting to parents about the child's behavior and progress in school. How the child behaves at home, the events in the home, and the quality of child-parent relationships are important to the teacher in providing for the child in school.

Often the parent's interpretation of a child's actions at home will be a key to the teacher. When Mary's mother says, "I can't understand why she misbehaves in school. She wouldn't dare at home," the teacher may have more understanding of Mary's conduct in school. Or when Billy's mother says, "William is a good boy. I don't allow him to play with the children in our neighborhood. They're too rough," the teacher gains in her knowledge of Billy's needs.

The school's objectives, procedures, and standards must be explained to parents to effect cooperation between school and home. It is important that parents and teachers understand that the aims of the school are directly related to the hopes and wishes that parents hold for their children.

There are various ways schools use to improve home-school relationships. It is important to make parents feel welcome in their very first contacts with the school. Usually this is at registration. At that time, parents should be received in a friendly manner and told about the routines and services of the school. Some schools supplement this welcome in the form of a booklet or leaflet which tells about the school.

Parents should be invited to the school frequently. They may be invited for a tour of the building, an assembly program, a demonstration lesson, observation in the classroom, a staff conference or an exhibit of children's work. Parents may also serve as volunteers in assisting in the classroom, as chaperons on field trips or at parties, and as resource people. Utilizing the skills and interests of parents can bring new ideas into the school and, at the same time, help parents feel a part of the school. Grandparents and other community members also have a great deal to offer in this regard.

If possible, a room should be set aside for parents' use. This will make them feel at home and also make them feel they are participating in the school program. The room can be used by the parents for many purposes, including parent-teacher association work, discussion groups, workshops in parent education, reading, or just socializing.

Parents and teachers should be encouraged to meet together. Through these meetings, parents can learn about the school program, the latest findings of research on the growth and educational development of children, new ways of teaching and new instructional materials. Keeping parents informed makes for greater cooperation. Learning from parents makes a better school program. Meetings should be held at times when working mothers and fathers can attend and they should be planned jointly by parents and teachers.

When parents are given many opportunities for coming into the school, teachers and parents develop closer relationships and parents become more interested in the school and its program. Parents and teachers learn to respect each other and to realize that school and home are working toward the same goals for children.

Open Space

Many modern elementary schools have been built with an open space plan. These buildings were designed with fewer interior walls to provide maximum flexibility for teachers and children.

Teachers who work in these open spaces often pool their resources in order to better meet the needs of individual children. Learning resource centers are established in areas of easy access to children from different groups. Often a center space is designated as a resource area and is stocked with books, audio-visual equipment, picture files and the like. All children utilize this area, moving in and out according to their particular need at a particular time. Library corners are scattered about which children can freely utilize to read quietly or share a story with someone. Science, social studies, and math centers are established where they may be utilized by children from various home stations.

Cooperative planning is necessary for effectively operating an open space school. Teachers find that by planning units together, they can provide the children with wider variety of resources and a greater selection of activities. Planning blocks of time for certain activities provides quiet times throughout the day when movement is at a minimum and other times when everyone is involved in a great deal of movement. Working together in establishing rules for cooperatively sharing space puts the responsibility for enforcing these rules on everyone, children and teachers.

Open space also encourages some large group activities, Group meetings often entail calling together all children and teachers who share an open space. These meetings, because of the numbers involved, are often quite formal. A problem presented at a large group meeting is discussed in smaller groups when the children return to their home station. A film or talk presented to the large group serves as the basis for follow-up in the smaller groups.

Summary

This overview has been prepared to give teachers, administrators, and others a summary of elementary education in New York State. It has been designed to illustrate how elementary education is a total program based on the natural growth and development of children. It has been developed in accordance with the Regents "Goals for Elementary, Secondary, and Continuing Education" to show how the various disciplines are integrated and how the skills in these disciplines are interrelated in terms of major educational objectives.

The elementary curriculum bulletins prepared and disseminated by the State Education Department generally deal with individual subjects. These bulletins present the scope, sequence, objectives, and some suggested teaching techniques for these subjects. Teachers and administrators should utilize these individual bulletins for specifics while using this overview as a guide to the total program.

APPENDIX

Curriculum Mandates

Certain topics are required to be taught in the elementary schools of New York State by the laws of the State, Rules of the Board of Regents, and Regulations of the Commissioner of Education. Complete statements of statutory requirements, Regents Rules, and Commissioner's regulations may be found in the publications entitled "Education Law," "Rules of the Board of Regents of the University of the State of New York," and "Regulations of the Commissioner of Education of the State of New York."

Periodically the Department issues a summary of these in the booklet "Minimum Requirements for Schools in New York." For the convenience of teachers and administrators the following excerpts from the 1976 edition of this booklet follow.

Subjects of Instruction

No pupil shall be refused admission to or excluded from any of the courses of instruction of a school because of his or her sex. (Ed. L., 3201a)

a) Instruction is required by law in the first eight grades in the following subjects: (Ed. L., 3204)

- arithmetic
- reading
- spelling
- writing
- English language
- geography
- United States history
- civics
- hygiene
- physical education
- New York State history
- science
- music and visual arts (CR 100.1e)

b) Beyond the first eight years, instruction is required (Ed. L., 3204) in:

- English
- civics
- hygiene
- physical education
- American history

(Courses in Communism, its methods and its destructive effects may be provided.)

c) In addition, the law (Ed. L., 801-810) requires that provision be made for instruction in certain special subjects, including:

patriotism and citizenship; history, significance, meaning and effect of Constitution of the United States and amendments thereto; Declaration of Independence; Constitution of New York State and amendments; 801
the flag, pledge of allegiance, certain holidays; 802
physical education and kindred subjects; 803
nature of alcoholic drinks and harmful effects on the human system; 804
nature and effects of narcotics and habit-forming drugs; 804a
highway safety and traffic regulation; school safety patrol; 806
fire drills; 807
fire prevention; 808
humane treatment of animals and birds; 809
Conservation day; 810

Physical Education

All public and nonpublic pupils in grades K-6 shall participate in the physical education program on a daily basis. The minimum time devoted to such programs shall be at least 120 minutes in each calendar week, exclusive of any time that may be required for dressing and showering; or as provided in an equivalent program approved by the Commissioner of Education. (CR 135.4)

Girls may participate on the same team with boys in interscholastic competition in the sports of archery, badminton, bowling, fencing, golf, gymnastics, cross country, riflery, rowing (but only as cowswain), shuffleboard, skiing, swimming and diving, table tennis, tennis, and track and field, provided the school attended by a girl wishing to participate in any such sport does not maintain a girl's team in that sport. In exceptional cases the principal or the chief executive officer of a school may permit a girl or girls to participate on a boys' team in a designated sport or sports, notwithstanding the fact that the school maintains a girls' team in that sport or sports. (CR 135.4 (4))

Safety Education

Instruction in safety education, including highway and traffic safety, and bicycle safety, shall be given to all pupils in elementary and secondary grades. The program must provide the minimum equivalent of thirty periods of instruction in grades 1-9 and fifteen periods of instruction in grades 10-12. (CR 107.1)

Health Education

Health instruction in the elementary school grades emphasizes the development of desirable health behavior, attitudes and knowledge on the part of children in the kindergarten and primary grades. In grades 4,5, and 6 provision shall be made for planned units of teaching which shall include health instruction. Health education in the elementary school grades shall be carried on by the regular classroom teacher. (CR 135.3)